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UNITED STATES TARIFF COMMISSION  
Washington, D.C.

TRADE AGREEMENT DIGESTS

Volume VII

AGRICULTURAL PRODUCTS AND PROVISIONS

Part 3

(This volume is in three parts. Part 1 includes digests on items provided for in paragraphs 701 to 716 and 722 to 752 of Schedule 7 of the Tariff Act of 1930, which are listed for consideration in the proposed negotiations; Part 2 includes digests on listed items provided for in paragraphs 753 and following paragraphs in Schedule 7 and digests on related items in the Free List which are subject to import-excise taxes; and Part 3 includes digests on paragraphs 717 to 721, inclusive, which pertain to fishery products.)

Prepared by the Tariff Commission for use in connection  
with trade agreement negotiations

November 1946

**List of Volumes in this Series**

Volume I - Chemicals, Oils, and Paints

Volume II - Earths, Earthenware, and Glassware

Volume III - Metals and Manufactures

Volume IV - Wood and Manufactures

Volume V - Sugar, Molasses, and Manufactures

Volume VI - Tobacco and Manufactures

Volume VII - Agricultural Products and Provisions

Volume VIII - Spirits, Wines, and Other Beverages

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Introduction

This volume (volume VII) contains approximately 235 digests of statistical, technical, and trade data on agricultural, fishery, and related products which have been listed (up to November 9, 1946) by the Trade Agreements Committee for consideration in the proposed trade agreement negotiations with those foreign countries which have been invited to participate in the so-called "nuclear" group. The digests cover all listed products provided for in schedule 7 of the Tariff Act of 1930 and related items on the Free List of the tariff act which are subject to import-excise taxes. Volumes similar to this one have been or are being prepared by the Tariff Commission on commodities provided for under other schedules of the tariff act which have been listed for these negotiations. Those products on the Free List of the act which are subject to import-excise or processing taxes are treated as dutiable commodities and are covered by digests which appear in the volumes for the tariff schedules to which such products are most nearly related. In addition, a special volume will be issued covering all commodities on the Free List which have been listed for the negotiations.

Volume VII is in three parts. Part 1 includes digests on items, provided for in paragraphs 701 to 716 and 722 to 752 of schedule 7 of the Tariff Act of 1930, which are listed for consideration in the proposed negotiations; part 2 includes digests on listed items provided for in paragraph 753 and all following paragraphs in schedule 7 and digests on related items in the Free List subject to import-excise taxes; and part 3 includes digests on paragraphs 717 to 721, inclusive, which pertain exclusively to fishery products.

## Summary for Parts 1 and 2

The principal products provided for in schedule 7, other than fishery products, are livestock, milk, farm crops (other than sugar and tobacco),<sup>1/</sup> and most of the products made from these raw materials (such as meats, dairy products, and feed-stuffs), canned and otherwise prepared fruits and vegetables, and bakery products. The farm income from these commodities, including both those listed and not listed for consideration in the proposed negotiations, averaged about 8 billion dollars a year in the period 1935-39; the total value of these products, including the value added by manufacture was about 10 billion dollars. Because of increased production and higher prices, the total value increased to over 20 billion dollars a year during the war.

Imports of all products, except fishery products, provided for in schedule 7 (those listed as well as those not listed for consideration in the proposed negotiations), and including related items on the Free List subject to import-excise taxes, amounted to about 150 million dollars (foreign value) in 1939; imports in that year were somewhat larger than in 1938 but less than the annual average in the period 1935-37 or during the war. In the aggregate these imports supplied less than 2 percent of the consumption in the United States in prewar years, though for many items the ratio was much higher or lower.

United States exports of products comparable with those imported under schedule 7, including related items on the Free List subject to import-excise taxes, amounted to approximately 300 million dollars annually before the war. The principal export items were pork and pork products, grain, flour, fruits, and canned and prepared vegetables. In 1943 the exports, mostly under lend-lease, increased to about 1.5 billion dollars.

<sup>1/</sup> Sugar, molasses, and manufactures are covered by volume V and tobacco and manufactures are covered by volume VI.

The ratio of the duties and import-excise taxes collected on all imports of commodities (other than fishery products) provided for in schedule 7 (including related items on the Free List which are subject to import-excise taxes) to the foreign value of such imports was about 35 percent in 1939 and 18 percent in 1943. The decline in the ratio was attributable largely to higher prices for items subject to specific rates of duty but also to reductions in duties in trade agreements, principally the trade agreements with Argentina and Mexico.

Those items (other than fishery products) provided for in schedule 7 (together with related items on the Free List subject to import-excise taxes) which are listed for consideration in the proposed negotiations, and covered by the digests contained herein, represented about 55 percent of the value of total imports in 1939 of all commodities (other than fishery products) provided for in schedule 7 and all related Free List items subject to import-excise taxes. 1/ Of the total imports in 1939 of items listed for consideration about 65 percent were accounted for by the following 6 commodities: Live cattle, edible nuts, spices, byproduct feeds, pineapples, and castor beans.

#### Summary for Part 3

Schedule 7 of the Tariff Act of 1930 provides for all fish and fish products imported for human consumption except fresh or frozen sea herring, smelts, and tuna fish which are on the Free List. (All fish imported for purposes other than for human consumption are free of duty.) In addition, schedule 7 provides for canned clams and clam products, canned oysters and oyster products, and crab meat, crab paste, and crab sauce. All other shellfish and shellfish products are on the Free List. There are no fishery products listed for consideration in the proposed negotiations which are on the Free List but subject to import-excise or processing taxes. 2/

The United States catch of all fish and shellfish, of which about 90 percent are marketed as, or processed into, products similar to those provided for in schedule 7, amounted to 4.4 billion pounds, valued at 97 million dollars (amount paid to fishermen), in 1939; the catch amounted to 4.2 billion pounds, valued at 204 million dollars in 1943. In recent years approximately two-thirds of the catch, by weight, has been used as food for human consumption and one-third in the manufacture of oil, meal, and byproducts, and for bait. The products used for human consumption, however, accounted for 85 percent of the value of the total catch in 1943. It is estimated that in 1943 the processing and packaging of the domestic catch of fishery products increased the value from 204 million dollars to 350 million dollars and that the retail value of these products, including the cost of distribution and marketing, amounted to 600 million dollars.

United States imports of the fishery products provided for in schedule 7 averaged 25 million dollars a year in 1936-40 and amounted to 30 million dollars in 1943. Before the war the foreign value of imports of such products was equivalent to approximately 16 percent of the value of United States consumption of similar products. For many individual items, however, the ratios were much higher or lower. The great bulk of imported fresh and frozen fish has come from Canada with relatively small quantities from Japan, Mexico, Newfoundland, and European countries; canned fish and shellfish have come principally from Western European countries and Japan; and pickled and salted fish have come principally from Canada, Newfoundland, Iceland, and Western European countries.

United States exports of fishery products comparable with those provided for in schedule 7 amounted to 12 million dollars in 1939 and represented about 8 percent of domestic production. During the war the value of exports more than

1/ Items, which in 1939 accounted for 72 percent of the total value of imports (other than fishery products) of items provided for in schedule 7, were subject to reduced rates of duty provided in trade agreements in effect on April 1, 1945.

2/ Certain fish oils which are provided for in schedule 1 of the tariff act or in the Free List of the act and subject to import-excise taxes are on the list of items for consideration in the proposed negotiations but these products are considered in volume I, part 2, covering Chemicals, Oils, and Paints.

trebled and at least 90 percent were shipped under lend-lease. The great bulk of the exports, both before and during the war, consisted of canned salmon, canned sardines, and canned mackerel. Although the exports went to a great many countries, the principal prewar markets were Western European countries and the Philippine Islands.

The ratio of the duties collected on all imports of the fishery products provided for in schedule 7 to the foreign value of such imports was 20 percent in 1936-40; it was 13 percent in 1941, and 8 percent in 1943. The decline in the ratio is attributable principally to a decrease in the imports during the war of products dutiable at relatively high ad valorem rates; and to increased prices of imports dutiable at specific rates. The decline in the ratio was also caused to a small extent by reductions in duties provided in trade agreements.

Those fishery products provided for in schedule 7 which are listed for consideration in the proposed negotiations, and covered by the digests contained herein, represented approximately 90 percent of the total value of imports in 1939 of all fishery products provided for in that schedule. <sup>1/</sup> The ratio in 1943 was 94 percent. Of the total imports in 1939 of the items listed for consideration, 30 percent (by value) were fresh or frozen fish, 51 percent were canned fish and shellfish, and 15 percent were pickled or salted fish; in 1943 the ratios were 60 percent, 8 percent, and 28 percent, respectively.

#### Explanatory Notes

The digests presented herein have been kept as brief as possible and contain only the data most pertinent to an understanding of the international competitive situation with respect to the various products. It was obviously impractical to include all the facts pertaining to the many commodities listed for consideration. Supplementing the data given in the digests, and available for use in the negotiations, is the extensive information contained in the files of the Commission and in its numerous published reports, as well as the knowledge and experience of its staff.

In several instances, where a number of closely related products are listed for consideration, a Summary Digest is given in addition to separate digests on each of the listed items. The Summary Digest gives statistics of production, exports, and imports for the group of related products as a whole, describes the interrelationships among the several products, and discusses general competitive problems. In a few cases the Summary Digest covers items which are not listed for consideration in the proposed negotiations and not covered by separate digests; such unlisted items have been included in order to give a more complete picture of the production and trade in all the related products of an industry. Occasionally the statistics of production given in such a Summary Digest relate to the product in both unfabricated and fabricated forms, resulting in some duplication. Where duplication is significant, attention is called to the fact.

Most of the digests give statistics of United States production, exports, and imports (total and by principal sources) for the three prewar years, 1937, 1938, and 1939 and for one war year, 1943. In the case of some commodities the statistics cover a much longer period. Where statistics of production or of exports of a particular commodity are not available, estimated figures, or some other indication of the relative importance of production and exports as compared with imports, are given when possible. Frequently a digest covers more than one statistical import class. In such cases, if the imports are significant, a supplementary table is given, showing for 1939, or some other representative prewar year, statistics of United States imports by individual statistical classes, by principal country of origin. Where exports under lend-lease are substantial, as well as where imports free for Government use, or free as an act of international courtesy, or free under special provisions of the Tariff Act of 1930 are substantial, they are indicated in footnotes to the tables.

<sup>1/</sup> Items, which in 1939 accounted for 57 percent of the total imports of fishery products under schedule 7, were subject to reduced rates of duty provided in trade agreements in effect on April 1, 1945.

Import values are in practically all cases foreign values, i.e., they do not include duties, transportation costs, and certain other charges incidental to the shipment of products from the foreign country to the United States. These values, therefore, are not strictly comparable with the values shown for United States production (which are usually the sales value of the product at the plant) or for exports (which represent the actual selling price including inland freight and other charges to the port of exportation).

The countries which are the principal sources of imports are generally listed in the table in the order of the magnitude (by value) of imports from them in 1939; and names of the proposed negotiating countries are given in capital letters.

The digests show for each item the rate of duty provided in the Tariff Act of 1930 and the 1945 (January 1) rate. Changes in the duty since the act of 1930 became effective are shown in detail in footnotes. When it is significant, the ad valorem equivalent (or the specific equivalent) of each rate of duty is given in a general note following the section on tariff rates.

In the case of many of the schedules, rates of duty on certain commodities were reduced by the trade agreements with the United Kingdom and Canada, effective January 1, 1939. The economic conditions in these countries and throughout the world were so disturbed in 1939, as the result of preparations for and actual outbreak of war, that the statistics of United States imports for that year cannot be taken as indicating what would have been the effects of these duty reductions under peacetime conditions; the import data for the war years are still less indicative of what would have been those effects.

FISH, FRESH OR FROZEN (WHETHER OR NOT PACKED IN ICE),  
WHOLE, OR BEHEADED OR EVISCERATED OR BOTH, BUT NOT  
FURTHER ADVANCED (EXCEPT THAT THE FINS MAY BE  
REMOVED), EXCEPT SEA HERRING, SMELTS, TUNA,  
MENHADEN, AND PILCHARDS—(SUMMARY DIGEST)

Stat. import classes (1939): 0047.0 - 0056.9

United States production, exports, and imports, 1937-39 and 1943

Year	Production <sup>1</sup>	Domestic exports <sup>2</sup>	Imports for consumption from—				
			All countries <sup>3</sup>	CANADA	Japan	Mexico	SOVIET UNION
Quantity (1,000 pounds)							
1937	1,864,336	4,611	87,063	73,221	5,765	6,256	1,475
1938	1,869,096	7,933	75,635	65,527	3,232	5,404	1,089
1939	1,721,155	6,058	74,792	67,922	1,737	4,384	535
1943	4/1,680,681	637	92,354	82,445	—	9,131	5
Value (1,000 dollars)							
1937	55,464	588	7,465	6,542	465	178	240
1938	51,382	847	6,786	6,115	252	146	209
1939	51,308	595	6,459	5,983	167	158	114
1943	4/ 90,282	88	15,298	14,472	—	669	1

1/ Catch, as landed, of all species under consideration in this digest. As to proportion marketed in the forms covered by the import statistical classes falling under this digest, see text.

2/ Includes fillets, etc., (see digest, par. 717(b)) and all other fresh or frozen fish.

3/ Includes imports from CUBA as follows: 7 thousand pounds valued at 1 thousand dollars in 1938; 3 thousand pounds valued at less than 1 thousand dollars (\$263) in 1939; 4 thousand pounds valued at less than 1 thousand dollars (\$400) in 1943. No imports in 1937.

4/ Production statistics are for 1942, the latest year for which complete data are available.

Source: Production from official statistics of the U. S. Fish and Wildlife Service; exports and imports from official statistics of the U. S. Department of Commerce.

Note.—For tariff classification, rates of duty, and ad valorem equivalents of the duties, see separate digests on the principal products here under consideration.

#### Comment

This classification covers all dutiable fresh or frozen fish which have not been further advanced than beheaded or eviscerated, except that the fins may be removed (it does not, for example, cover fresh or frozen fish fillets). Sea herring, smelts, and tuna fish, fresh or frozen in any form, are not included inasmuch as imports of these items enter free of duty under paragraph 1756. Menhaden and pilchards have also been excluded as the United States neither imports nor exports these fish, in the fresh or frozen condition; substantially the entire domestic catch of menhaden and pilchards is utilized in the production of fish meal, fish oil, and canned sardines (pilchards). Because of the diversities among the many items in the group as a whole, individual digests have been prepared supplying separate data on the principal products.

The production data in the above table are not comparable with the import data, since the former include the total catch of the species under consideration whether or not marketed fresh or frozen, and since they include the weight as landed, whereas many of the imported fish have had part of the weight removed by beheading, eviscerating, etc.

FISH, FRESH OR FROZEN (WHETHER OR NOT PACKED IN ICE),  
 WHOLE, OR BEHEADED OR EVISCERATED OR BOTH, BUT NOT  
 FURTHER ADVANCED (EXCEPT THAT THE FINS MAY BE  
 REMOVED), EXCEPT SEA HERRING, SMELTS, TUNA,  
 MENHADEN, AND PILCHARDS--(SUMMARY DIGEST)--Continued

In recent years domestic processing industries have taken increasing quantities of the United States total catch of certain species of fish - most of the salmon, for example, is canned; the bulk of the alewives are salted or canned; and the fresh and frozen filleting industry takes a large part of the catch of rosefish, whiting, haddock, cod, and flounders. On the other hand, most of the catch of various other species, such as Atlantic mackerel, bluefish, spot, sea trout, lake fish, and croakers is marketed either whole, or not further advanced than beheaded and eviscerated. However, at least a part of the catch of all species included herein is marketed fresh or frozen and not advanced beyond the provisions of this tariff paragraph; for all the species here covered the proportion so marketed is about 40 percent. For this reason landed weight of the catch of all species, except sea herring, smelts, tuna fish, menhaden and pilchards, is included in the production shown in the table above.

The relatively unimportant exports shown in the table include fresh and frozen fish of all species, including perhaps small quantities of sea herring, smelts, tuna fish, and packaged fish (fillets, etc.). [See separate digest on packaged fish, paragraph 717(b)]. It is believed, however, that most of the exports consist of products within the scope of this digest.

\* The statistics of imports given in the above table relate to all products covered by paragraph 717(a). Although the great bulk of them are marketed in the condition in which they are imported some are further processed after importation. Most of the imports of sturgeon are subsequently smoked, some of the salmon are subsequently mild cured (salted); and some of the imports of lake fish are subsequently filleted or smoked. Imports in this classification, therefore, compete chiefly with that part of the domestic catch which is marketed fresh or frozen as "whole" fish. The following table shows the domestic production (estimated), imports, exports, and apparent consumption of fresh and frozen "whole" fish, of the species covered by this digest.

Year	Estimated production used: fresh or frozen:	Imports for consumption: fresh or frozen:	Domestic exports: fresh or frozen:	Apparent consumption: fresh or frozen:	Ratio of imports to consumption: Percent
1937	1,000 pounds 865,605	1,000 pounds 87,063	1,000 pounds 4,611	1,000 pounds 948,057	9.2
1938	845,533	75,635	7,933	913,235	8.3
1939	770,783	74,792	6,058	839,517	8.9
1943 <sup>1/</sup>	641,276	92,354	637	732,993	12.6

<sup>1/</sup> Production for 1942, the latest available data.

The statistics shown above present data for at least 150 species of fish, most of which are insignificant either in domestic production or imports. Substantially all imports of certain species or groups of species come from a single country; most imports of white sea bass (totuava), for example, come from Mexico, whereas Canada is the source of substantially all imports of fresh-water fish.

Paragraph 717(a) of the Tariff Act of 1930, as amended, specifically names 25 species of fish. The present rates of duty on these products range from 1/2 cent to 3 cents per pound.

FISH, FRESH OR FROZEN (WHETHER OR NOT PACKED IN ICE), WHOLE, OR BEHEADED OR EVISCERATED OR BOTH, BUT NOT FURTHER ADVANCED (EXCEPT THAT THE FINS MAY BE REMOVED), EXCEPT SEA HERRING, SMELTS, TUNA, MENHADEN, AND PILCHARDS--(SUMMARY DIGEST)--Continued

The separate digests which follow deal respectively with: (1) Fresh-water fish and eels, (2) salmon, (3) halibut, (4) mackerel, (5) swordfish, (6) sturgeon, and (7) other fish. In the titles of the several digests the limiting words as to the degree of advancement of the fish (which apply alike to all species) are omitted for brevity; they appear in the statements regarding rates of duty.



## FRESH-WATER FISH AND EELS, FRESH OR FROZEN

Stat. import classes (1939): 0047.0-0048.8

United States production, exports, and imports for consumption,  
1937-39 and 1943

Year	Production 1/	Domestic exports	Imports 2/
Quantity (1,000 pounds)			
1937	127,062	Not	56,408
1938	125,162	avail-	49,774
1939	128,579	able	50,790
1943	3/ 119,212	:	57,323
Value (1,000 dollars)			
1937	8,250	Not	4,938
1938	8,315	avail-	4,478
1939	8,992	able	4,209
1943	3/ 10,874	:	9,803

1/ Includes the catch in Lakes and the Mississippi River and tributaries; does not include sturgeon and shovel nose sturgeon. Data show total weight of catch, but most of it is sold fresh or frozen. 2/ Virtually all from CANADA.

3/ Production statistics are for 1942 the latest year for which complete data are available.

Source: Production from statistics of the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate Cents per pound	
Par. 717 (a)			
Fish, fresh or frozen (whether or not packed in ice), whole, or beheaded or eviscerated or both, but not further advanced (except that the fins may be removed):			
Fresh-water fish:			
Whitefish	1	1/2/ 3/4	)
Yellow pike	1	1/2/ 3/4	)
Jacks or grass pike	1	1/2/ 3/4	)
Lake trout	1	1/2/ 3/4	)
Yellow perch	1	2/ 3/4	)
Tullibees	1	1/2/ 3/4	)
Lake herring and ciscoes	1	2/ 3/4	)
Chubs	1	1/2/ 3/4	)
Mullet (catostomus)	1	1/2/ 3/4	)
Saugers	1	1/2/ 3/4	)
Blue pike	1	2/ 3/4	)
Other	1	1	)
Eels	1	1/2/ 1/2	)

1/ Trade agreement with Canada, effective January 1936.

2/ Trade agreement with Canada, effective January 1939.

Note.- See following page.

## FRESH-WATER FISH AND EELS, FRESH OR FROZEN—Continued

Note.— The rates of duty shown above for 1945 were also applicable to imports in 1939. The ad valorem equivalents of these duties in 1939 and 1943 were as follows:

Item	1939	1943	Item	1939	1943
Whitefish	7%	3%	Yellow pike	8%	4%
Jacks or grass pike	15%	7%	Lake trout	7%	3%
Yellow perch	10%	4%	Tullibees	20%	10%
Lake herring and ciscoes	6%	4%	Chubs	7%	3%
Mullet (catostomus)	11%	11%	Saugers	16%	6%
Blue pike	12%	5%	Fresh-water fish, n.e.s.	24%	8%
			Eels	8%	5%

Comment

The production figures shown in the above table represent the total United States catch of fresh-water fish and eels except smelts and sturgeon. (Smelts are imported free of duty under paragraph 1756 and sturgeon are covered in the fifth digest following this one.) The import data cover all fresh-water fish and eels (except smelts and sturgeon) imported fresh or frozen except those which have been further processed (filleted, etc.). (See separate digest on par. 717 (b)). Although some of the production and import data reported above relate to items further processed in the United States by filleting, salting, smoking, etc., the quantities so treated are not known. It is known, however, that the great bulk of the domestic and imported products are marketed fresh or frozen without being advanced beyond the limits set forth in this tariff paragraph.

In recent years United States consumption of the various products covered by this classification has averaged 175 million pounds annually; imports, almost entirely from Canada, have supplied about 30 percent of the total.

The domestic catch, taken from numerous lakes and rivers, includes a wide variety of species, most of which either are not imported at all or are imported only in insignificant quantities. Thus, direct competition in the United States market occurs primarily between the domestic catch in the Great Lakes and the Canadian catch in the same waters and in the interior lakes of Canada. Such competition involves chiefly the 12 species of fish specifically mentioned above, the duties on which were reduced in the Canadian trade agreements, effective January 1936 and January 1939. These 12 species ordinarily constitute about 55 percent of the total United States catch and more than 90 percent of the imports of fresh-water fish and eels. Most of the United States landings of these species and about two-fifths of Canada's are drawn from a common source, four of the Great Lakes; most of the remainder of Canada's catch is from the interior lakes of that country.

Although the United States production of frozen fresh-water fish has increased in recent years, the great bulk of the catch is still marketed fresh. Transportation problems and the perishable character of the product limit Canadian exports almost entirely to the United States. In recent years Canada has exported about three-fourths of its catch and exports have generally fluctuated directly with the size of the catch.

Inasmuch as most species of fresh-water fish bring relatively high prices, and since the United States is the only important outlet for the Canadian surplus of these products, the present comparatively low duties are not prime factors affecting the volume of imports. Moreover, a substantial part of the imports, products of the winter fishery in interior Canadian lakes, reach the United States market during seasons when there is a shortage of domestic supplies.

## FRESH-WATER FISH AND EELS, FRESH OR FROZEN--Continued

A convention between the United States and Canada, relating to the fisheries of the Great Lakes and their connecting waters, was signed on April 2, 1946, and now awaits ratification by the Senate. For a great many years the Governments of the two countries, as well as the fishermen, have been concerned over the decline of fish in the Great Lakes, particularly that of the more desirable species; and cooperative action by the two Governments has long been urged as indispensable to an effective and orderly development of the fisheries. The convention provides for the development, protection, and conservation of the Great Lakes fisheries and for the creation of an International Commission for the Great Lakes Fisheries authorized to establish regulations (1) providing for open and closed seasons, (2) designating open and closed waters, (3) limiting the size of the various species of fish which may be caught, and (4) governing the type and specifications of nets and gear which may be used. Operation of the fisheries under the terms of the convention, if ratified by the Governments of the United States and Canada, would probably be considerably more important to the trade in fresh-water fish than changes in the tariff status of these products.

Fresh-water fish and eels, fresh or frozen: United States imports for consumption, by species, 1939 and 1943 <sup>1/</sup>

Item	1939	1943
Whitefish	\$1,389,972	\$3,111,229
Yellow pike	715,616	1,971,968
Jacks or grass pike	126,094	378,787
Lake trout	106,666	885,194
Yellow perch	147,495	387,409
Tulibees	55,933	153,865
Lake herring and ciscoes	368,096	237,575
Chubs	122,649	232,276
Mullet (cetostomus)	52,174	204,141
Saugers	458,813	862,788
Blue pike	270,636	985,779
Fresh-water fish, n.e.s.	50,793	306,570
Eels	44,444	85,812
Total	4,209,381	9,803,333

<sup>1/</sup> In both years more than 90 percent of the imports came from CANADA  
Source: Official statistics of the U. S. Department of Commerce.



Stat. import class (1939): 0050.0

United States production, exports, and imports, 1937-39 and 1943

Year	Production <sup>1/</sup>	Domestic exports	Imports for consumption from		
			All countries	CANADA	Soviet Union
Quantity (1,000 pounds)					
1937	691,161	3,394	6,616	6,426	171
1938	656,229	6,345	5,632	5,398	147
1939	528,806	4,407	6,548	6,385	163
1943	2/ 510,821	8	2/ 5,209	4,974	4/
Value (1,000 dollars)					
1937	17,433	457	592	557	33
1938	14,313	707	605	557	31
1939	13,535	451	657	615	42
1943	2/ 23,705	3	2/ 1,450	1,391	4/

1/ Total catch as landed. For estimates of quantity marketed fresh or frozen, see text.

2/ Production statistics are for 1942, the latest year for which complete data are available.

3/ Includes 234 thousand pounds valued at 59 thousand dollars imported from Newfoundland and Labrador. 4/ Less than 500.

Source: Production from statistics of the U. S. Fish and Wildlife Service; exports and imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
		Cents per pound	
Par. 717(a) Fish, fresh or frozen (whether or not packed in ice), whole, or beheaded or eviscerated, or both, but not further advanced (except that the fins may be removed):			
Salmon	2	1/ 1	CANADA

1/ Trade agreement with Canada, effective January 1939; rate had been reduced to 1½ cents per pound in previous agreement with Canada, effective January 1936.

Note.—The ad valorem equivalent of the duty of 1 cent per pound was 10 percent on imports in 1939 and 4 percent on imports in 1943.

#### Comment

The statistics shown in the above table for United States production represent the total domestic catch of salmon; those for exports and imports, on the other hand, represent fresh or frozen salmon only. Separate statistics relating to the trade in fresh and frozen salmon (not including the small quantity in filleted form) are given in the following table. From these figures and those presented in the previous table, it will be seen that (1) salmon marketed fresh or frozen accounts for about 15 percent of the United States total catch of salmon, (2) imports of fresh and frozen salmon are relatively small, usually supplying about 6 percent of total domestic consumption, and (3) United States exports constitute only a negligible portion of the annual catch.

## SALMON, FRESH OR FROZEN—Continued

Year	Estimated	Imports	Exports	Apparent	Ratio of im-
	production	fresh or	fresh or	con-	ports to con-
	used fresh	frozen	frozen	sumption	sumption
	: 1,000	: 1,000	: 1,000	: 1,000	: Percent
	: pounds	: pounds	: pounds	: pounds	:
1937	133,809	6,616	3,394	137,031	4.8
1938	119,250	5,632	6,345	118,537	4.8
1939	82,679	6,548	4,407	84,820	7.7
1943	1/ 77,577	5,209	8	82,778	6.3
	:	:	:	:	:

1/ Production for 1942, the latest available data.

Salmon are found in practically all coastal waters of the North Atlantic and North Pacific Oceans. Of the total world catch, estimated to be more than a billion pounds annually, about 95 percent is taken in the North Pacific, where the bulk of it is canned. The small quantities caught in the North Atlantic are practically all marketed fresh or frozen in European and North American markets.

Before the war the United States, Canada, Japan, and the Soviet Union accounted for practically all of the salmon caught in the North Pacific. The bulk of the catch of all four countries was canned inasmuch as the canned product enjoys a world-wide demand and thus furnishes a profitable outlet for the tremendous quantities caught during the spring and summer which cannot be satisfactorily disposed of in any other manner. During the decade before the war about 95 percent of the United States imports of fresh and frozen salmon came from Canada; the remainder came principally from Newfoundland, the United Kingdom, Japan, and the Soviet Union. Three countries took 90 percent of United States exports in this form, the United Kingdom 36 percent, France 31 percent, and Canada 23 percent.

The annual catch of the United States during the past 15 years has ranged from about 500 million pounds to nearly 800 million pounds. Ordinarily nearly 90 percent of the domestic catch is taken in Alaska where the great bulk of it is canned, not more than 2 percent being marketed fresh or frozen. In the Pacific coast States, which account for 10 to 15 percent of the total United States catch, approximately two-thirds of the output is taken by the canneries. These States, however, also supply about 85 percent of the domestic salmon marketed fresh or frozen, Alaska furnishing most of the remainder. Of the total United States catch (including that of Alaska) only about 15 percent is marketed fresh or frozen (not including the small quantity of fresh and frozen fillets).

In the immediate future Japan and the Soviet Union will probably be more concerned with recovering prewar markets for their canned salmon than with developing new outlets for the fresh or frozen product. In the past a large part of the catches of these two countries was salted for domestic consumption and for export to Asiatic countries. The requirements for food in these countries and the resumption of salmon canning for the export trade, therefore, are likely to take precedence over efforts to develop foreign markets for frozen fish. Most of the relatively small catch by European countries will continue to be consumed on the Continent. It is probable, therefore, that if any marked increase in United States imports should occur it would nearly all come from Canada.

In Canada, as in the United States, the salmon fishery is predominantly on the Pacific coast. The total Canadian catch averages about 165 million pounds annually, or about a fourth that of the United States. About 15 percent of the Canadian catch is marketed fresh or frozen, most of the remainder being canned. Whereas the United States ordinarily exports only about 5 percent of the domestic salmon which is marketed fresh or frozen, Canada exports about half of its total production. About 90 percent of Canada's exports go to the United States and the United Kingdom, both countries taking about equal amounts.

## SALMON, FRESH OR FROZEN--Continued

Note.- The foregoing comments apply only to salmon not further advanced than beheaded, eviscerated, or with fins removed. During the past 15 years there has been an extraordinary development in the production and marketing of fresh and frozen fish in packaged form, principally as fillets and steaks; this trade has developed largely at the expense of fish formerly marketed fresh or frozen "whole," or salted. Although salmon has played a relatively insignificant part in this trade, increasing quantities have been marketed in this manner and the indications are that production will continue to expand. It is likely, therefore, that the Canadian producers may convert part of their supplies of fresh and frozen "whole" salmon to fillets and steaks for export to this market. Salmon fillets and steaks are dutiable at  $2\frac{1}{2}$  cents per pound under paragraph 717(b). (See separate digest on fillets, paragraph 717(b)).



## HALIBUT, FRESH OR FROZEN

Stat. import classes (1939): 0053.0 and 0053.2

United States production, exports, and imports, 1937-39 and 1943

Year	Production 1/	Domestic exports 2/	Imports for consumption from—			
			All countries	CANADA	Newfoundland	
Quantity (1,000 pounds)						
1937	45,834	82	4,958	4,878	1	
1938	45,286	117	5,922	5,857	9	
1939	44,258	38	5,499	5,498	1	
1943	3/ 52,935	1	7,079	7,071	5	
Value (1,000 dollars)						
1937	3,438	6	497	488	4/	
1938	3,124	10	631	624	1	
1939	3,089	3	536	536	4/	
1943	3/ 5,992	4/	1,482	1,480	1	

1/ Catch as landed.

2/ Data shown are Canadian imports from the United States and account for the bulk of total United States exports.

3/ Production statistics are for 1942, the latest year for which complete data are available. 4/ Less than 500.

Source: Production statistics from U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce; and Canadian imports from Trade of Canada.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
Cents per pound			

Par. 717 (a)

Fish, fresh or frozen (whether or not packed in ice), whole, or beheaded or eviscerated or both, but not further advanced (except that the fins may be removed):

Halibut:

Fresh	2	1/ 1	CANADA
Frozen	2	1/ 1	do.

1/ Trade agreements with Canada, effective January 1936 and January 1939.

Note.— The ad valorem equivalent of the duty of 1 cent per pound was 9 percent on fresh halibut and 11 percent on frozen halibut imported in 1939; it was 5 percent on imports of both fresh and frozen in 1943.

Comment

Halibut are caught in the northern waters of the Atlantic and Pacific Oceans, the latter area furnishing from two-thirds to three-fourths of the world catch. Ordinarily most of the Atlantic catch is taken by fishermen of the United Kingdom and Norway, and the Pacific catch by those of the United States and Canada. Although statistics of the international trade in halibut are not available, it is known that exports from the United States go almost entirely to Canada and Canadian exports almost entirely to the United States. The exportable surpluses of Norway and the United Kingdom are sold principally in European markets. Most of the relatively small catch of Newfoundland is exported to Canada and the United States.

## HALIBUT, FRESH OR FROZEN--Continued

Most of the world catch of halibut, including the catches of the United States and Canada, is marketed fresh or frozen; only negligible quantities are salted, smoked, or canned.

During the 5-year period ending in 1941, the United States catch averaged 47 million pounds annually; 4 percent of the total was taken on the Atlantic coast, and 96 percent on the Pacific. During the same period the Canadian catch averaged 16 million pounds, 21 percent being taken on the Atlantic coast and 79 percent on the Pacific. Thus, as between the two countries, the United States accounted for about a third of the catch on the Atlantic and Canada for two-thirds; but on the Pacific coast, the United States took four-fifths of the catch and Canada one-fifth.

Nearly all of the halibut caught on the Atlantic coast is marketed fresh and is landed near the larger centers of consumption. The United States and Canadian catch on the Atlantic coast is generally inadequate to meet the requirements of that area. The reverse, however, is true of the Pacific and prices there are generally lower than on the Atlantic coast. Moreover, Pacific coast halibut generally commands somewhat lower prices than the Atlantic coast product in the same market.

The depletion of supplies of halibut in the north Pacific led in 1924 to the negotiation of the Pacific Halibut Convention between the United States and Canada. The primary objective of the agreement was to conserve breeding stocks and increase available supplies. An International Fisheries Commission, created at that time to carry out the provisions of the convention, has been continued in subsequent conventions (the last in 1937) and its powers broadened. As now constituted the Commission is authorized to divide the fishing grounds into areas, establish closed seasons, specify the type of gear to be used, and establish annual quotas limiting the total amount of halibut to be taken by the fishermen of the two countries. The convention does not authorize the establishment of country quotas. The quota for 1935 was fixed at 46,000,000 pounds; that for 1946 is 52,500,000 pounds. Since 1925 the Canadian share of the total Pacific catch has risen from an annual average of 17 percent in the five years 1926-30, to 18 percent in 1931-35, to 24 percent in 1936-40, and to 25 percent in 1941-45.

In the past the quantity of halibut imported into the United States has been fairly sensitive to changes in the rates of duty, and particularly to increases or decreases in the ad valorem equivalent of the duty. In 1936, immediately after the duty was reduced from 2 cents to 1 cent per pound, total imports from Canada were nearly double those in 1935, and the average annual imports from Canada during the 3-year period following the reduction of duty were nearly 70 percent greater than they were during an equivalent period before the reduction. As has been indicated, the relative share taken by Canadian fishermen on the Pacific coast during this time increased substantially.

Halibut, fresh or frozen: United States imports for consumption  
by principal source 1939 and 1943

Item	:	:	Imports		
			Year	Total	Principal source
Fresh	:	:	:	:	
	:	1939	\$477,288	:	CANADA, \$477,288
Frozen	:	1943	1,052,147	:	CANADA, 1,050,953
	:	1939	108,925	:	CANADA, \$108,623
	:	1943	429,470	:	CANADA, \$429,470

Source: Official statistics of the U. S. Department of Commerce.

## MACKEREL, FRESH OR FROZEN

Stat. import classes (1939): 0054.1 and 0054.5

United States production, exports, and imports, 1937-39 and 1943

Year	Production 1/	Domestic exports	Imports for consumption from--		
			All countries	CANADA	
Quantity (1,000 pounds)					
1937 ---	87,537	Not available	1,881	1,806	
1938 ---	123,137	available	1,149	1,144	
1939 ---	113,503	available	1,210	1,210	
1943 ---	2/ 103,628	available	1,900	1,879	
Value (1,000 dollars)					
1937 ---	1,725	Not available	99	96	
1938 ---	2,173	available	68	67	
1939 ---	2/ 1,773	available	66	66	
1943 ---	3,715	available	169	166	

1/ Total catch as landed. For estimates of quantity marketed fresh or frozen, see text.

2/ Production statistics are for 1942, the latest year for which complete data are available.

Source: Production from statistics of the U.S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff			Proposed negotiating country	
	Act of 1930	1945			
		rate	Cents per pound		
Par. 717(a)					

Fish, fresh or frozen (whether or not packed in ice), whole, or beheaded or eviscerated or both, but not further advanced (except that the fins may be removed):

Mackerel:

Fresh	2	1/ 1	CANADA
Frozen	2	1/ 1½	

1/ Trade agreement with Canada effective January 1939.

Note.—The duty of 1 cent per pound on imports of fresh mackerel was equivalent to 18 percent ad valorem in 1939 and 10 percent in 1943. The duty of 1½ cents per pound on imports of frozen mackerel was equivalent to 28 percent ad valorem in 1939 and 17 percent in 1943.

Comment

The production statistics shown in the above table represent the total United States catch of mackerel, whereas the statistics of imports relate only to imports of mackerel, fresh or frozen. The United States catches of mackerel are landed in northeastern Atlantic ports and in California. Substantially the entire catch on the Pacific coast is taken by California canneries; the insignificant quantities marketed fresh or frozen in that area are consumed locally. The mackerel caught on the Atlantic coast, on the other hand, is marketed almost entirely fresh or frozen east of the Mississippi River; relatively small quantities of this catch are

## MACKEREL, FRESH OR FROZEN-Continued

canned, salted, filleted, or smoked and processing industries are generally dependent for supplies of fresh mackerel on sporadic surpluses which occur in the fresh market. Imports of fresh or frozen mackerel are competitive with that part of the Atlantic coast catch which is marketed fresh or frozen. Exports of fresh or frozen mackerel are insignificant and are confined almost entirely to border shipments to Canada.

United States production (estimated), imports, and apparent consumption of fresh and frozen mackerel are shown in the following table:

Year	Estimated	Imports	Apparent	Ratio of
	production	fresh or frozen	consumption	imports to consumption
	: 1,000 pounds	: 1,000 pounds	: 1,000 pounds	Percent
1937	21,726	1,881	23,607	8.0
1938	38,490	1,149	39,639	3.0
1939	27,843	1,210	29,053	4.2
1943	1/ 30,960	1,900	32,860	6.0

1/ Production for 1942, the latest available data.

Although mackerel are caught in several European and Asiatic countries, almost all imports into the United States of the fresh and frozen product have come from Canada. The entire Canadian catch of mackerel is landed in the Maritime Provinces, where, as in the northeastern United States, the annual catches fluctuate markedly, largely with the migrations of fish of the different age groups. From 80 to 90 percent of the mackerel caught on the United States Atlantic coast is marketed as fresh or frozen "whole" fish. Canada, on the other hand, processes from 65 to 80 percent of its catch, principally as split salt mackerel and salt mackerel fillets. This leaves from 20 to 35 percent of Canada's output which is marketed fresh or frozen, about 80 percent of which is consumed within the country and the remainder is exported, almost entirely to the United States.

Before 1939 the bulk of the imports under this classification were fresh mackerel, a highly perishable product. Owing to the lack of adequate freezing and refrigeration facilities in some of the relatively remote but highly productive areas of Canada, and the higher transportation costs, Canadian exports to the United States were usually confined to mackerel caught in nearby western Nova Scotia and New Brunswick.

During and since the war, however, freezing facilities have expanded markedly in Canada, with the result that plants are now available for freezing and storing mackerel in those areas of Nova Scotia where, formerly most of the catch was salted for export, principally to the British West Indies and the United States. Frozen mackerel usually afford larger returns to fishermen and primary dealers than do the salted products.

## MACKEREL, FRESH OR FROZEN- Continued

Mackerel, fresh or frozen: United States imports for consumption,  
by principal source, 1939 and 1943

Item	Year	Imports	
		Total	Principal Source
Fresh -----	1939	\$27,718	CANADA, \$27,718
	1943	5,688	CANADA, \$3,688;
			Mexico, \$2,000
Frozen -----	1939	38,093	CANADA, \$38,093
	1943	162,936	CANADA, \$162,936

Source: Official statistics of the U. S. Department of Commerce.



## SWORDFISH, FRESH OR FROZEN

Stat. import classes (1939): 0055.3 and 0055.5

United States production, exports, and imports, 1937-39 and 1943

Year	Production <sup>1</sup>	Domestic exports	Imports for consumption from--			Imports for consumption from--
			All countries <sup>2</sup>	CANADA	Japan	
Quantity (1,000 pounds)						
1937	2,602	Not	6,517	1,300	5,216	
1938	2,861	avail-	4,197	1,237	2,953	
1939	2,652		3,164	1,558	1,605	
1943	<sup>3/</sup> 1,146	able	2,870	2,869	-	
Value (1,000 dollars)						
1937	396	Not	693	276	417	
1938	441	avail-	418	196	222	
1939	399		368	220	148	
1943	<sup>3/</sup> 278	able	856	856	-	

<sup>1/</sup> Total catch as landed.<sup>2/</sup> See text concerning imports of frozen swordfish "divided into portions" and not included in these statistics.<sup>3/</sup> Production statistics are for 1942, the latest year for which complete data are available.

Source: Production from statistics of the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
		Cents per pound	

Par. 717(a)

Fish, fresh or frozen (whether or not packed in ice), whole, or beheaded or eviscerated or both, but not further advanced (except that the fins may be removed):

Swordfish:

Fresh -----	2	<sup>1/</sup> 1
Frozen (naturally or artificially) -----	2	<sup>2/</sup> 3

CANADA

<sup>1/</sup> Trade agreement with Canada, effective January 1939; rate had been reduced to 1½ cents lb. in previous trade agreement with Canada, effective January 1936.<sup>2/</sup> Presidential proclamation under Sec. 336 of the Tariff Act of 1930, effective February 1936.

Noté.- The ad valorem equivalent of the duty of 1 cent per pound on imports of fresh swordfish was 7 percent in 1939 and 3 percent in 1943; on the frozen product the duty of 3 cents per pound on imports was equivalent to 32 percent in 1939 and 10 percent in 1943.

## SWORDFISH, FRESH OR FROZEN-Continued

Comment

The swordfish is one of the largest food fishes; although some attain a weight of 800 pounds, the average is from 200 to 400 pounds. About two-thirds of the United States catch is taken off the coasts of New England and southeastern Canada; California and Hawaii account for the remainder. The Hawaiian catch is nearly all marketed locally and that of California is marketed west of the Rocky Mountains. The bulk of the swordfish caught on the Atlantic coast, landed principally in Boston, finds a ready market in the New England and Middle Atlantic States. Swordfishing is generally carried on only in fair weather by mackerel purse seiners that switch to swordfishing whenever a more profitable return therefrom is indicated. Aside from prices, therefore, principal factors influencing the New England catch are economic conditions in the New England mackerel fishery, and the weather.

The total United States catch of swordfish has declined almost continuously since 1929, when it amounted to 7 million pounds. This trend, however, has been confined entirely to the Atlantic coast catch. Inasmuch as swordfish have become increasingly popular on the Pacific coast, the annual catch in California has increased substantially over that of the 1920's.

Most of the domestic catch (excluding that of Hawaii) is marketed as fresh fish in continental United States where it generally brings a higher price than the frozen product. The freezing of swordfish, therefore, has been confined largely to sporadic landings of surpluses which cannot be profitably disposed of as fresh fish.

Imports into the United States have come almost entirely from Canada and Japan. Canada exports substantially all of its catch to the United States. Although there is a domestic market for swordfish in Japan, it has not been sufficient to absorb that country's production. Ordinarily about four-fifths of Japan's exports enter the United States. Before the war, imports supplied from one-half to two-thirds of United States consumption; Canada supplied about one-third of the total imports, and Japan practically all of the remainder. During and since the war Canada has been the sole source of imports.

Imports from Canada consist largely of fresh swordfish; those from Japan consist of frozen fish. Official statistics of recent prewar years underestimate the imports of frozen swordfish from Japan; this arises from the fact that the Japanese frequently cut the "whole" fish into two or more pieces, whereby the product becomes dutiable at  $2\frac{1}{2}$  cents per pound as "fish divided into portions" (under paragraph 717(b); see the digest on that paragraph), rather than at 3 cents per pound on "whole" fish (under paragraph 717(a)).

If the duty on frozen "whole" fish were reduced below the duty on frozen fish "divided into portions", it would result in a considerable shift in the imports from the latter to the former.

Swordfish is one of the higher-priced fish marketed fresh and frozen; the domestic market has nearly always been able to absorb the available supplies (domestic and foreign) at relatively stable prices. It is unlikely that the domestic fishery will expand appreciably during the post-war years.

## SWORDFISH, FRESH OR FROZEN-Continued

Swordfish, fresh or frozen: United States imports for consumption, by principal sources, 1939 and 1943

Item	Year	Imports	
		Total	Principal source
Fresh			
	1939	\$215,112	CANADA, \$215,112
	1943	735,677	CANADA, \$735,451
Frozen			
	1939	152,555	Japan, \$148,114;
			CANADA, \$4,441
	1943	120,577	CANADA, \$120,577

Source: Official statistics of the U. S. Department of Commerce.



## STURGEON, FRESH OR FROZEN

Stat. import classes (1939): 0055.6 and 0055.7

United States production, exports, and imports, 1937-39 and 1943

Year	Production <sup>1/</sup>	Domestic exports	Imports for consumption from—			
			All countries	CANADA	SOVIET UNION	Rumania
Quantity (1,000 pounds)						
1937	359	Not available	947	269	641	37
1938	340	Not available	1,184	353	750	78
1939	293	Not available	875	557	281	30
1943	2/ 400		260	254	5	—
Value (1,000 dollars)						
1937	30	Not available	191	80	103	8
1938	34	available	292	118	156	17
1939	29	available	276	207	61	6
1943	2/ 53		150	149	1	—

<sup>1/</sup> Catch consists of sturgeon and shovel-nose sturgeon.<sup>2/</sup> Production statistics are for 1942 the latest year for which complete data are available.

Source: Production from statistics of the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
Par. 717(a)		Cents per pound	
Fish, fresh or frozen (whether or not packed in ice), whole, or beheaded or eviscerated or both, but not further advanced (except that the fins may be removed):			
Sturgeon:			
Fresh	1	1/ 1/2	CANADA
Frozen	1	1	CANADA, SOVIET UNION

<sup>1/</sup> Trade agreement with Canada, effective January 1939.

Note.— The ad valorem equivalent of the duty of 1/2 cent per pound on imports of fresh sturgeon was 2 percent in 1939 and 1 percent in 1943; the duty of 1 cent per pound on the frozen product was equivalent to 3 percent in 1939 and 1 percent in 1943.

Comment

Most of the sturgeon consumed in the United States is prepared by smoking; the roe, however, is salted and sold as sturgeon caviar. (See separate digest on sturgeon caviar, par. 721(d).)

The United States catch of sturgeon comes principally from the northern coastal bays and rivers, the Great Lakes, and the Mississippi River and its tributaries. Due to overfishing, the supply in all of these waters has become seriously depleted; production, therefore, cannot be increased without further

## STURGEON, FRESH OR FROZEN-Continued

reducing breeding stocks. In 1890 the catch in the Delaware River alone amounted to 5 million pounds but since 1929 the total annual United States catch has not exceeded one-half million pounds. There is no longer an established sturgeon fishery in this country, the catch being incidental to other fishing operations.

Data are not available for the catch in other countries. It is known, however, that the Soviet Union is the only country with a substantial sturgeon fishery; most of the Soviet catch is taken in the Caspian Sea and the Volga River. Although the annual catch in Canada is larger than in the United States, it, also, is incidental to the operations of other fisheries.

During the 1930's United States imports came almost entirely from the Soviet Union, Canada, Rumania, and Japan, the Soviet Union and Canada supplying 84 percent and 14 percent of the total, respectively. Imports from substantially all sources, except Canada, consisted of frozen fish. In 1939-41 two-thirds of the imports from Canada were of frozen fish and one-third of fresh fish. In 1942-45, however, the ratios were reversed. Since 1938 the duty on fresh fish has been  $\frac{1}{2}$  cent per pound less than the rate on the frozen product.

Sturgeon, fresh or frozen: United States imports for consumption  
by principal sources, 1939 and 1943

Item	Year	Imports	
		Total	Principal source
		:	:
Fresh	:	:	:
	1939	\$ 55,812	CANADA, \$55,812
	1943	78,290	CANADA, \$78,290
Frozen	:	:	:
	1939	219,942	CANADA, \$151,345;
			SOVIET UNION, \$61,421
	1943	71,637	CANADA, \$71,088;
			SOVIET UNION, \$549
	:	:	:

Source: Official statistics of the U. S. Department of Commerce.

Sturgeon is primarily a luxury product, the United States demand for which greatly exceeds the domestic catch.

FISH, FRESH OR FROZEN (OTHER THAN SEA HERRING, SMELTS, TUNA, MENHADEN, PILCHARDS, HALIBUT, MACKEREL, SALMON, STURGEON, SWORDFISH, AND FRESH-WATER FISH AND EELS)

Stat. import classes (1939): 0052.1, 0052.5, 0056.1, and 0056.9

United States production, exports, and imports, 1937-39 and 1943

Year	Production 1/	Domestic exports 2/	Imports for consumption from--			
			All countries	Mexico	CANADA	CUBA
Quantity (1,000 pounds)						
1937	909,781	1,217	9,736	6,154	2,239	-
1938	916,081	1,588	7,778	5,398	1,768	7
1939	903,064	1,651	6,707	4,384	1,932	3
1943	3/ 892,539	629	17,713	8,988	8,204	4
Value (1,000 dollars)						
1937	24,192	131	455	175	110	-
1938	32,982	140	295	146	75	1
1939	23,491	144	297	158	81	4/
1943	3/ 45,665	85	1,383	645	650	4/

1/ Data show total landed weight of the catch of the species covered, only part of which is marketed as "whole" fresh or frozen fish. See text.

2/ Includes fillets, etc. (see separate digest, par. 717(b), and all other fresh or frozen fish, except salmon.

3/ Production statistics are for 1942, the latest year for which complete data are available. 4/ Less than 500.

Source: Production from statistics of the U. S. Fish and Wildlife Service; imports and exports from official statistics of the U. S. Department of Commerce.

Item	United States tariff 1/		Proposed negotiating country
	Act of 1930	1945 rate	
	Cents per pound		
Par. 717(a)			

Fish, fresh or frozen (whether or not packed in ice), whole, or beheaded or eviscerated or both, but not further advanced (except that the fins may be removed):

Cod, haddock, hake, pollock, and cusk:

Without fins removed	1	2/ 3/4	
With fins removed	1	2/ 1	
Shad	1	2/ 1/2	
White sea bass or totoaba (totuaya)	1	4/ 1/2	
Other 5/	1	1	

CANADA

do.

do.

do.

do.

CANADA, CUBA

1/ Product of Cuba dutiable at 2/5 cent per pound under trade agreement with Cuba, effective September 1934.

2/ Trade agreement with Canada, effective January 1939.

3/ Bound, trade agreement with Canada, effective January 1939.

4/ Trade agreement with Mexico, effective January 1943.

5/ Does not include salmon, mackerel, halibut, sturgeon, swordfish, and fresh-water fish and eels.

See note on following page.

FISH, FRESH OR FROZEN (OTHER THAN SEA HERRING, SMELTS, TUNA, MENHADEN, PILCHARDS, HALIBUT, MACKEREL, SALMON, STURGEON, SWORDFISH, AND FRESH-WATER FISH AND EELS)-Continued

Note.- The rates of duty applicable to imports in 1939 and in 1943, and the ad valorem equivalents thereof were as follows:

Item	1939	1943
Cod, haddock, hake, pollock, and cusk:		
Without fins removed -----	3/4¢ lb. 19%	3/4¢ lb. 10%
With fins removed -----	1¢ lb. 18%	1¢ lb. 10%
Shad -----	1/2¢ lb. 10%	1/2¢ lb. 6%
White sea bass (totuava) -----	1¢ lb. 1/	1/2¢ lb. 8%
Other (unspecified) -----	1¢ lb. 22%	1¢ lb. 11%

1/ Not separately reported before 1943; included with "Other."

Comment

This digest covers all fresh or frozen "whole" fish as defined in paragraph 717(a) i.e. not further advanced than boned or eviscerated, except the following: (1) Halibut, salmon, mackerel, swordfish, sturgeon, and fresh-water fish and eels, all of which are treated separately in preceding digests. (2) Menhaden and pilchards; these fish, fresh or frozen, do not enter the import or export trade and substantially the entire domestic catch is used in the production of fish meal, fish oil, and canned sardines (pilchards). (3) Sea herring, smelts, and tuna fish; these species, if fresh or frozen, are imported free of duty under paragraph 1756. (Fish, fresh or frozen, when filleted, skinned, boned, sliced, or divided into portions (packaged fish) are covered by paragraph 717(b) and are dealt with in the digest which follows this one.)

Of the numerous species of fish covered by the classification here under consideration, more than 100 species are caught in the United States. Approximately three-fourths of the total domestic catch of this group, however, consists of the following 10 species: Alewives, cod, croakers, flounders, haddock, mullet, pollock, rosefish, sea trout, and whiting. Relatively few of these more than 100 species are distributed widely as fresh or frozen "whole" fish. A great many of the species, because of limited supplies, are marketed near the ports where they are landed. The bulk of the catch of most of those species which are distributed widely as fresh or frozen fish is marketed not as "whole" fish but as packaged fish, principally as fillets and steaks, imports of which are dutiable under paragraph 717(b). (See separate digest.) Substantially the entire catch of rosefish and whiting, about half that of flounders and cod, and two-thirds that of haddock, are used in the production of packaged fish (fillets, etc.). Many other species also are packaged to some extent. Moreover, appreciable quantities of the fish here under consideration are canned, pickled, salted, smoked, or kippered. Altogether about 60 percent of the total catch is marketed in these forms or as packaged fish, leaving about 40 percent of the catch which is marketed as fresh or frozen "whole" fish within the meaning of paragraph 717(a).

Exports of fresh or frozen "whole" fish under this classification have been insignificant in relation to production and imports. Exports have never exceeded 4 million pounds annually and generally more than half of them have gone to Canada.

Before the war the bulk of the imports, which never exceeded 10 million pounds annually, came from Canada and Mexico. Those from Canada consisted almost entirely of the same species caught by United States fishermen in North Atlantic and North Pacific waters. About half of the imports from Mexico consisted of white sea bass (totuava), and most of the remainder were barracuda, corbina, cabrillo, yellowtail, sea trout, croakers, and red drum (redfish). Ordinarily most of the imports from Canada are consumed in the Northern States whereas those from Mexico go principally to the Southwestern and Gulf Coast States.

FISH, FRESH OR FROZEN (OTHER THAN SEA HERRING, SMELTS, TUNA, MINHALEN,  
PILCHARDS, HALIBUT, MACKEREL, SALMON, STURGEON, SWORDFISH  
AND FRESH-WATER FISH AND EELS)-Continued

Substantially all the imported fish are marketed in the condition in which they are imported, i.e., they are not further processed in this country. Imports, therefore, compete principally with that part of the domestic catch which is marketed as fresh or frozen "whole" fish. United States production, exports, imports, and consumption of the fresh or frozen "whole" fish here under consideration are shown in the following table:

Year	Estimated	Imports,	Exports,	Apparent	Ratio of
	production	fresh or frozen:	fresh or frozen:	consumption:	imports
	used	fresh or frozen:	consumption:	to	consumption
Quantity (1,000 pounds)					<u>Percent</u>
1937	534,213	9,736	1,217	542,732	1.8
1938	514,144	7,778	1,588	520,334	1.5
1939	484,479	6,707	1,651	489,535	1.4
1943	<u>1/</u> 359,046	17,713	629	376,130	4.7

1/ Production is for 1942, the latest available data.

Imports increased substantially during and since the war owing principally to - (1) the generally high prices which have prevailed in this country, (2) the wartime scarcity of meats and certain fish, and (3) the loss by Canada of other export markets for fish. It is probable, however, that imports will decline to about prewar levels, with the restoration of normal trade conditions.

Imports of fresh or frozen "whole" fish in the longer term post-war period will depend to a large extent upon the trend in the United States consumption of both domestic and imported packaged fish (principally fresh and frozen fillets). Should this trend continue upward, it is unlikely that imports of fresh or frozen "whole" fish will be materially above prewar levels, and they may decrease somewhat. Domestic production of packaged fish increased from 74 million pounds in 1931 to an estimated 220 million pounds in 1945, while imports of these products increased from 3 million pounds to 55 million pounds. 1/

It is probable that the domestic consumption of packaged fish will continue to increase. Some foreign countries, which hitherto have been insignificant sources of imports, have expanded their facilities with a view to exporting a substantial part of their production of packaged fish to this country. Furthermore, the production of packaged fish in Canada has been primarily for export, with the bulk of the output coming to the United States; in the prewar decade Canadian products accounted for more than 90 percent of United States imports of packaged fish. Canada also is expanding its facilities for producing fresh and frozen packaged fish. Although a large part of its increased production of packaged fish may be derived from larger catches or by diverting supplies from the fish salting industry, the Canadian packaging industry will also utilize fish which otherwise would be exported to this country as "whole" fish. The future imports of packaged ground fish into the United States will, of course, depend in part on the situation with respect to rates of duty and quotas relating to that product. (See separate digest).

In Mexico (which has been the principal United States source of imported fresh and frozen "whole" fish) the filleting, packaging, and freezing industries began later and developed more slowly than in most other fish-exporting countries. For several years, therefore, imports of fresh and frozen products from that country will likely continue to consist largely of "whole" fish.

1/ As approximately 100 pounds of round fish are required to produce 36 pounds of packaged fish, some 200 million pounds of round fish were used in 1931, and 600 million pounds in 1945, to produce packaged fish. Imports of packaged fish represented about 8 million pounds of round fish in 1931 and 150 million pounds in 1945.

## FISH, FRESH OR FROZEN (WHETHER OR NOT PACKED IN ICE) FILLETED, SKINNED, BONED, SLICED, OR DIVIDED, N.S.P.F.

Stat. import classes (1939): 0060.1, 0060.5

United States production, exports, and imports, 1931, 1935, 1937-39 and 1943-45

Year	Production	Domestic exports	All countries <sup>1/</sup>	Imports for consumption from			
				CANADA	JAPAN	Newfoundland	Iceland
Quantity (1,000 pounds)							
1931	74,319		3,008	2,927	5	2/	-
1935	111,258		4,101	4,012	51	3	-
1937	117,432	Not avail-	10,870	8,713	1,740	60	250
1938	127,150		9,455	7,288	1,982	8	5
1939	138,684		15,649	12,384	3,166	65	13
1943	3/ 167,639	able	4/ 21,539	19,506	-	1,086	672
1944	3/ 181,295		4/ 30,946	26,765	-	2,560	680
1945	3/ 220,000		4/ 55,015	48,217	-	3,962	2,281
Value (1,000 dollars)							
1931	10,999		327	316	1	2/	-
1935	11,986		415	407	5	2/	-
1937	13,144	Not avail-	1,073	888	153	5	21
1938	12,690		915	729	176	1	2/
1939	14,453		1,489	1,163	317	6	1
1943	3/ 39,389	able	4/ 4,055	3,706	-	174	108
1944	3/ 42,621		4/ 16,539	5,694	-	504	160
1945	3/ 51,700		4/ 11,721	10,167	-	843	650

1/ No imports from CUBA for the period shown, except for 2 thousand pounds valued at 1 thousand dollars imported in 1945, and less than 500 pounds and 500 dollars in 1944.

2/ Less than 500. 3/ Preliminary.

4/ Free for Government use, 1,042 thousand pounds, valued at 192 thousand dollars in 1943; 3,278 thousand pounds, valued at 701 thousand dollars in 1944; and 3,181 thousand pounds, valued at 837 thousand dollars in 1945.

Source: Production statistics from the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945	
		rate	
		Cents per pound	

## Par. 717(b)

Fish, fresh or frozen (whether or not packed in ice), filleted, skinned, boned, sliced, or divided into portions, n.s.p.f.:

Cod, haddock, hake, pollock, cusk, and rosefish:

Product of Cuba	2	1/1	-
Other than product of Cuba	2 $\frac{1}{2}$	2 $\frac{1}{2}$ -7/8 or 2 $\frac{1}{2}$	CANADA

Other:

Product of Cuba	2	1/1	CUBA
Other than product of Cuba	2 $\frac{1}{2}$	3/2 $\frac{1}{2}$	CANADA

1/ Trade agreement with Cuba, effective September 1934.

2/ Trade agreement with Canada, effective January 1939. Lower rate applies to annual quota of 15 million pounds or 15 percent of previous consumption, whichever is the larger. Imports in excess of quota dutiable at the higher rate.

3/ Rate bound in trade agreement with Canada, effective January 1939.

Note.— (See next page.)

FISH, FRESH OR FROZEN (WHETHER OR NOT PACKED IN ICE), FILLETED, SKINNED, BONED, SLICED, OR DIVIDED, N.S.P.F.- Continued

Note.- The ad valorem equivalent of the duty on imports of cod, haddock, hake, pollock, cusk, and rosefish was 25 percent in 1939 and 11 percent in 1943; on other fish it was 20 percent in 1939 and 10 percent in 1943. There were no imports from Cuba under either classification in those years.

Comment

General

The products covered by paragraph 717(b) consist of all fresh or frozen fish (except sea herring, smelts, and tuna fish), which have been "filleted, skinned, boned, sliced, or divided into portions." The trade classifies most of the products as fillets, steaks, sticks, pan-dressed, and skinned fish. Inasmuch as both domestic production and imports consist almost entirely of fillets, this term will hereinafter be used to refer to all products here under consideration. In accordance with the tariff classification, fillets, etc. prepared from cod, haddock, hake, pollock, cusk, and rosefish will be referred to as groundfish fillets and those prepared from other species as other fillets.

Although fillets have been prepared by retail dealers for many years, domestic production on a large scale at the fishing centers was not begun until 1921, when approximately 50,000 pounds of cod and haddock fillets were prepared. Since then the filleting industry has developed rapidly; commercial production in the United States amounted to 68 million pounds in 1933, 117 million pounds in 1937, 186 million pounds in 1941, and an estimated 220 million pounds in 1945.

Fillets are now produced in practically all coastal States, States bordering the Great Lakes, and in Alaska, but substantially all of the groundfish fillets are produced in the New England and Middle Atlantic States. In 1944, the New England States accounted for about 78 percent of the total production of fillets, Pacific coast States for 9 percent, Middle Atlantic States for 6 percent, Great Lakes States for 6 percent, and other areas for 1 percent.

Groundfish fillets represented 75 percent of the total domestic production of fillets in 1931 and increased to 82 percent in 1937; but the share declined to 60 percent in 1944, and 61 percent in 1945. This decline in percentage occurred notwithstanding substantial increases in the production of groundfish fillets because of the much larger increases in the output of other fillets.

The production of fillets during specified years since 1930 was as follows:

Year	Total production:		Groundfish fillets:		Other fillets	
	Quantity (1,000 lb.)	Percent of total	Quantity (1,000 lb.)	Percent of total	Quantity (1,000 lb.)	Percent of total
1931	74,319	74.8	55,590	74.8	18,729	25.2
1933	67,575	74.5	50,329	74.5	17,246	25.5
1935	111,258	85.0	85,039	76.4	26,219	23.6
1937	117,432	81.6	95,771	81.6	21,661	18.4
1939	138,684	72.5	100,482	72.5	38,202	27.5
1940	132,995	68.1	90,644	68.1	42,351	31.9
1941	185,923	65.9	122,584	65.9	63,339	34.1
1942	181,905	57.9	105,276	57.9	76,629	42.1
1943 (Preliminary)	167,639	51.6	86,562	51.6	81,077	48.4
1944 (Preliminary)	181,295	60.0	108,755	60.0	72,540	40.0
1945 (Preliminary)	220,000	61.3	134,800	61.3	85,200	38.7

Source: United States Fish and Wildlife Service.

FISH, FRESH OR FROZEN (WHETHER OR NOT PACKED IN ICE), FILLETED, SKINNED, BONED, SLICED, OR DIVIDED, N.S.P.F.- Continued

Imports of fresh and frozen fillets were not separately reported before the passage of the Tariff Act of 1930, and the distinction in import statistics between groundfish fillets and other fillets was not made until the Canadian trade agreement became effective January 1, 1939.

Total imports of fillet increased from 3 million pounds in 1931 to more than 15 million pounds in 1939 and to 55 million pounds in 1945. Imports of groundfish fillets increased from 9 million pounds in 1939 to 43 million pounds in 1945, while imports of other fillets increased from 6 million pounds to 12 million pounds in the same period. Thus, groundfish fillets constituted 60 percent of the total imports in 1939 and 78 percent in 1945.

Imports of fillets during specified years since 1930 were as follows:

Year	Total imports	Groundfish fillets	Other fillets		
	Quantity (1,000 lb.)	Quantity (1,000 lb.)	Percent of total	Quantity (1,000 lb.)	Percent of total
1931	3,008	-	-	-	-
1933	2,505	-	-	-	-
1935	4,101	-	-	-	-
1937	10,870	-	-	-	-
1939	15,649	9,426	60.2	6,223	39.8
1940	15,786	9,740	61.7	6,046	38.3
1941	13,651	9,931	72.7	3,720	27.3
1942	20,190	16,674	82.6	3,516	17.4
1943 (Preliminary)	21,539	16,323	75.8	5,216	24.2
1944 (Preliminary)	30,946	24,545	79.3	6,401	20.7
1945 (Preliminary)	55,015	43,169	78.5	11,846	21.5

Source: Official statistics of the U. S. Department of Commerce.

Domestic consumption of fresh and frozen fillets almost quadrupled between 1931 and 1945 (increasing from 77 to 275 million pounds). Production in the United States (practically all for domestic consumption) increased 146 million pounds or threefold (from 74 to 220 million pounds). Imports increased 52 million pounds (from 3 to 55 million) or about 18 fold. Imports supplied 4 percent of consumption in 1931, 10 percent in 1939, and about 20 percent in 1945.

The increased consumption of fillets does not reflect an absolute increase in the consumption of fresh and frozen fish, but, to a very large extent, occurred at the expense of a decrease in the consumption of domestic fresh and frozen fish marketed either whole or partially dressed, and to a lesser extent at the expense of a decrease in consumption of domestic and imported salted fish.

The United States consumption of fillets and the ratio of domestic production and imports to consumption during specified years was as follows:

FISH, FRESH OR FROZEN (WHETHER OR NOT PACKED IN ICE), FILLETED, SKINNED, BONED, SLICED, OR DIVIDED, N.S.P.F. - Continued

Year	Consumption (1,000 lb.)	Percentage of consumption supplied by-		Imports
		Domestic production:	Imports	
1931	77,327	96.1	3.9	
1933	70,080	96.4	3.6	
1935	115,359	96.4	3.6	
1937	128,302	91.5	8.5	
1939	154,333	89.9	10.1	
1940	148,781	89.4	10.6	
1941	199,574	93.2	6.8	
1942	202,095	90.0	10.0	
1943 (Preliminary)	189,178	88.6	11.4	
1944 (Preliminary)	212,242	85.4	14.6	
1945 (Preliminary)	275,015	80.0	20.0	

Source: Production statistics from United States Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

#### Groundfish fillets

Production of groundfish fillets in the United States (almost entirely in New England), although fluctuating with the catch of fish, has shown a strong upward trend ever since the product was introduced in the early 1920's. Output increased from 50 million pounds in 1933 to 123 million pounds in 1941; thereafter it fell to 87 million pounds in 1943, when the total catch of groundfish declined sharply with the diversion of a large proportion of the more efficient fishing vessels to war service. Production in 1945, however, was the largest in the history of the industry--estimated at 135 million pounds.

Except for minor fluctuations, production of groundfish fillets in Canada increased steadily from 9 million pounds in 1933 to 38 million pounds in 1943, the latest year for which data are available. Very much larger relative increases occurred in Newfoundland and Iceland. In 1933 estimated production in those two countries did not exceed 2 million pounds, but in 1945 Newfoundland alone produced about 31 million pounds of frozen groundfish fillets, and in 1944 Iceland produced about 49 million pounds.

Approximately 85 percent of the groundfish fillets produced in the United States consist, in the order of their importance, of haddock, rosefish, and cod. In Canada cod, haddock, and hake account for more than 95 percent of the total and in Newfoundland and Iceland substantially the entire production consists of cod fillets.

Although some of the major species of groundfish have a wide distribution throughout the world, Canada, Newfoundland, and Iceland have been and will likely continue to be the principal sources of groundfish fillets imported into the United States. During the period 1939-45 these three countries were the sole foreign suppliers, except in 1940 when 17,000 pounds were entered from Mexico and the United Kingdom. Before 1943 Canada was the only important source of imports, supplying 99 percent of the total in 1939 and 95 percent in 1942. In 1945, however, Canada supplied 88 percent, Newfoundland 9 percent, and Iceland 3 percent. During the period January-August 1946, Canada supplied only 78 percent, whereas Newfoundland and Iceland each accounted for 11 percent of the total. These data suggest that Iceland and Newfoundland may supply a relatively larger share of United States imports in the future.

In the trade agreement with Canada, effective January 1939, the duty on groundfish fillets was reduced from 2½ cents to 1-7/8 cents per pound; this rate, however, is applicable only to an annual quota of 15 million pounds, or of 15 percent of

FISH, FRESH OR FROZEN (WHETHER OR NOT PACKED IN ICE), FILLETED, SKINNED, BONED, SLICED, OR DIVIDED, N.S.P.F.- Continued

the average annual United States consumption during the three preceding years, whichever is the higher. Imports in excess of the quota remain dutiable at  $2\frac{1}{2}$  cents per pound. Not until 1942, however, did imports exceed the minimum quota (15 million pounds) established in the agreement. Quotas (based on 15 percent of consumption) and actual imports each year since 1941 were as follows:

Year	Quota (Pounds)	Total imports (Pounds)
1942	17,174,495	16,674,082
1943	17,804,128	16,323,416
1944	18,210,658	24,545,569
1945	17,668,311	43,169,156
1946	1/20,380,724	-

1/ Quota filled early in June.

Source: Official statistics of the U. S. Department of Commerce.

The average unit value of the United States production of groundfish fillets increased from 9.5 cents per pound in 1939 to 24.7 cents per pound in 1943; there was little change in 1944 and 1945, after ceiling prices had been established by the Office of Price Administration. Similarly, the average unit foreign value of United States imports increased from 7.6 cents per pound in 1939 to 16.6 cents per pound in 1943 and was about 20 cents per pound in 1944 and in 1945.

As prices of fish products advanced the duty became a less important barrier to imports. In 1939, when all imports of groundfish fillets were dutiable at  $1\frac{7}{8}$  cents per pound, the ad valorem equivalent of the total duties collected on such products was 24.7 percent. In 1945, however, the same rate of duty applicable to imports entered under the quota represented only 9.8 percent of the foreign value of such imports; moreover, the duty of  $2\frac{1}{2}$  cents per pound on imports in excess of the quota represented only 12.4 percent of their value.

Canada, Newfoundland, and Iceland produce a large exportable surplus of groundfish, particularly cod, haddock, and hake. In the prewar years, most of the catch was salted for export, principally to Europe, South America, and the West Indies. During the war exports to some of these markets were either eliminated or substantially curtailed; the increased demand for frozen fish in the United States and the United Kingdom, however, encouraged a marked expansion of freezing and filleting facilities in those three countries. Most of the plants in Newfoundland and Iceland were constructed as emergency measures. Newfoundland has 44 filleting plants and 15 freezing plants, which, in 1945, produced 31 million pounds of groundfish fillets. Iceland has 62 freezing plants which in 1944 produced 49 million pounds of fillets. Freezing and filleting facilities were also expanded in Canada during the war. Although the United Kingdom took a substantial part of Canada's increased production of fillets, the United States continued to be Canada's principal market for these products. The major part of the production in Newfoundland and Iceland, during the war, however, went to the United Kingdom.

With the cessation of hostilities and the resumption of fishing operations by the United Kingdom fleet, the British demand for imported groundfish fillets declined markedly. Not only did exports from Canada and Newfoundland to the United Kingdom decline; but also late in 1945 the United Kingdom failed to renew its contract with Iceland for most of that country's production of fillets. Subsequently, Iceland entered agreements with the Soviet Union and certain other European countries for the disposal of the bulk of its production in 1946. These agreements, however, may be regarded as transitory arrangements which may not continue through 1947-48-49, during which time the purchasing countries may reach or expand their prewar level of

FISH, FRESH OR FROZEN (WHETHER OR NOT PACKED IN ICE), FILLETED, SKINNED, BONED, SLICED, OR DIVIDED, N.S.P.F.- Continued

production. Similar instability, though perhaps to a lesser extent, may characterize the exports of Canada and Newfoundland to countries other than the United States.

The United States apparent consumption, production, and imports of groundfish fillets since 1938 were as follows:

Year	Apparent consumption		Production		Imports	
	Quantity (1,000 lb.)	Percent of consumption	Quantity (1,000 lb.)	Percent of consumption	Quantity (1,000 lb.)	Percent of consumption from Canada
1939	109,908	100,482	91.4	9,426	8.6	99.4
1940	100,384	90,644	90.3	9,740	9.7	99.1
1941	132,515	122,584	92.5	9,931	7.5	98.1
1942	121,950	105,276	86.3	16,674	13.7	95.4
1943 (Prelim.)	102,885	86,562	84.1	16,323	15.9	89.2
1944 (Prelim.)	133,301	108,755	81.6	24,546	18.4	86.9
1945 (Prelim.)	177,969	134,800	75.7	43,169	24.3	87.6

Source: Production statistics from United States Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Other fillets

Commercial production of other fillets (other than groundfish fillets) began in New England not long after the successful introduction of groundfish fillets in the early 1920's. Since then, except for minor fluctuations, the volume of production has increased steadily; output rose from 19 million pounds in 1931 to 73 million pounds in 1944 and to an estimated 85 million pounds in 1945; thus the output of other fillets accounted for 25 percent of the total fillet production in 1931, and about 40 percent in 1944 and 1945.

During the early years of the development of the industry other fillets were prepared almost entirely from species of fish landed in New England, but as the industry expanded to other fishing areas a great many other species were used. Nevertheless, in 1944 more than four-fifths of the total production was from 11 species of fish. These consisted of Atlantic coast flounders, mackerel, ocean pout, and whiting; Pacific coast flounders, rockfish, and lingcod; and Great Lakes blue pike, lake herring, saugers, yellow pike, and yellow perch. In addition, there has been a substantial increase in the production of skinned catfish in several inland rivers and lakes, and in coastal bays. Despite the expansion of filleting to practically all coastal States and the Great Lakes States, New England continues to be the predominant producer of other fillets. In 1944 the New England States accounted for 53 percent of the total production; the Middle Atlantic States supplied 5 percent; the Great Lakes States, 13 percent; the Pacific coast States, 22 percent; and other areas, 7 percent.

Statistics covering imports of other fillets are available only for the years since 1938. Despite the elimination of Japan as an important source after 1940, imports of such fillets increased from 6 million pounds in 1939 to 12 million pounds in 1945. Canada accounted for 48 percent of the total United States imports of these products in 1939 and 88 percent in 1945. Imports from Canada usually consist of fillets processed from the same species of fish used for filleting in the northeast, northwest, and Great Lakes areas of the United States. About two-thirds of the imports from Japan under this heading were not fillets, but consisted of frozen swordfish "chunks"—i.e., dressed fish divided into two or more pieces. (Before February 22, 1936, practically all imports of frozen swordfish consisted of whole dressed fish, dutiable at 2 cents per pound under par. 717(a). On that date the duty was increased by Presidential proclamation to 3 cents per pound. Thereafter

FISH, FRESH OR FROZEN (WHETHER OR NOT PACKED IN ICE), FILLETED, SKINNED, BONED, SLICED, OR DIVIDED, N.S.P.F. - Continued

the bulk of the imports of frozen swordfish were "divided into portions," which are dutiable at  $2\frac{1}{2}$  cents per pound.) Imports of other filets from sources other than Canada and Japan have come almost entirely from Peru, Mexico, Bahamas, Iceland, and Newfoundland.

The average unit value of United States production of other fillets increased from 12.8 cents per pound in 1939 to 22.2 cents per pound in 1943, with little change in 1944 and 1945. The average unit foreign value of United States imports of these items increased from 12.4 cents per pound in 1939 to 25.9 cents per pound in 1943, with substantially no change in 1944 and 1945.

As in the case of groundfish fillets, the duty of  $2\frac{1}{2}$  cents per pound became a less important barrier to imports when prices advanced. In 1939, the duty representing 20.1 percent of the foreign value of imports; in each of the years 1943, 1944, and 1945, it represented only 9.6 percent.

Production of other fillets is feasible in practically every foreign country possessing an established fishing industry or available supplies of fish sufficient to justify the establishment of such an industry. The production of frozen fillets is contingent upon the establishment or expansion of freezing facilities. With the exception of some imports from Canada, substantially all United States imports of fillets have to be frozen to prevent spoilage in transit; even the bulk of the imports from Canada have been so preserved.

Little is known concerning the possibilities of future imports of other fillets from European or Asiatic countries. It is likely, however, that Japanese exports of frozen "chunks" of swordfish to the United States will be resumed when swordfishing in Japan is reestablished. Inasmuch as Canada, Newfoundland, and Iceland are on a pronounced export basis they probably will expand their shipments to the United States as long as this trade is more profitable than marketing the catch as salted, canned, or smoked fish. During the war the filleting and freezing industry developed or expanded in other countries, notably Peru, Mexico, and the Bahamas; and because of the limited domestic market in those countries and the higher prices obtaining in foreign outlets, most of their production was exported. There are indications that the output in those countries will be able to expand still further if adequate foreign markets, (particularly in the United States) can be found.

The United States apparent consumption, production, and imports of other fillets since 1938 were as follows:

Year	Production			Imports			
	Apparent consumption	Percent of consumption	Quantity (1,000 lb.)	Percent of consumption	Quantity (1,000 lb.)	Percent of total imports supplied by	Other countries
						Canada	Japan
	(1,000 lb.)	(1,000 lb.)	(1,000 lb.)				
1939	44,425	38,202	86.0	6,223	14.0	48.5	50.9
1940	48,397	42,351	87.5	6,046	12.5	49.5	49.9
1941	67,059	63,339	94.5	3,720	5.5	78.6	20.0
1942*	80,145	76,629	95.6	3,516	4.4	97.9	-
1943*	86,293	81,077	94.0	5,216	6.0	94.7	-
1944*	78,941	72,540	91.9	6,401	8.1	84.8	-
1945*	97,046	85,200	87.8	11,846	12.2	87.7	-

\*Preliminary.

Source: Production statistics from United States Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

FISH, FRESH OR FROZEN (WHETHER OR NOT PACKED IN ICE), FILLETED, SKINNED,  
BONED, SLICED, OR DIVIDED, N. S. P. F.- ContinuedProspects of the industry

Although the fisheries of this country are older than the Nation itself, the filleting trade did not come into existence until the early 1920's. Because of the relative youth of the industry itself and the even more recent development and expansion of retail distribution of frozen foods, it is probable that the full potential of demand for fillets has not yet been realized. Equally important is the fact that wartime dislocations have prevented an orderly development of the industry. The wartime scarcity of protein foods generally, the relatively high prices (especially in the United States) which have prevailed for fish products since 1942, and Government assistance to the fishing industries in a number of foreign countries have led to an expansion of productive facilities substantially greater than would have occurred during an equivalent number of years had peace prevailed. Neither prices nor productive capacities, therefore, have been permitted to find their "natural level". Consequently, ultimate adjustments to conditions of a more normal market appear to be inevitable.

That the fishing industry as a whole faces significant problems of readjustment seems evident. These problems may be accentuated when meat products are again more readily available and when the fisheries of Europe and Asia resume full production. The prices received by fishermen for their catches may be expected to decline substantially and a period of economic uncertainty may ensue until forces in the market reach relative equilibrium. In view of the greater expansion of facilities for producing fillets, the filleting industry may experience even greater difficulties than will prevail in other food processing, preserving, and marketing fields. It is natural, therefore, that producers (both fishermen and processors of fillets) should seek, if possible, to maintain as long as possible the high prices and resultant high incomes which prevailed during the war. It is also probable that producers will attempt to cushion the shocks which seem likely to accompany the readjustments ultimately necessary and will seek to retain for themselves a preferred position in the domestic market.

The principal foreign producers, especially in Canada, Newfoundland, and Iceland, have certain competitive advantages over producers in the United States. Canadian producers pay less for their raw material (fresh fish); wages paid to their filleters and packers are lower; and freight rates from principal Canadian production centers to the large consuming centers in the Midwestern States about equal those prevailing from principal producing areas in the United States. Newfoundland and Iceland have substantially the same advantages, except in transportation costs, and perhaps the same holds true with respect to other foreign sources of supply.



FISH, DRIED AND UNSALTED

Stat. import classes (1939): 0062.0, 0062.2

United States production, exports, and imports, 1937-39 and 1943

Year	Production <sup>1</sup>	Domestic exports	Imports for consumption from--				
			All countries	NORWAY	Japan	Mexico	CANADA
Quantity (1,000 pounds)							
1937	1,200	Not available	3,499	1,930	1,061	96	196
1938	1,051		2,809	1,773	770	72	76
1939	508		2/3,003	2,002	714	74	81
1943	3/ 719	able	4/695	-	-	227	5
Value (1,000 dollars)							
1937	96	Not available	424	217	124	26	15
1938	89		367	213	98	21	5
1939	56		2/ 386	234	97	16	10
1943	3/ 39	able	4/ 192	-	-	36	1

1/ Consists of stockfish (dried, unsalted cod), salmon, and shark fins.

2/ Imports from China (fourth source in 1939) amounted to 43 thousand pounds, valued at 14 thousand dollars. Imports from China were relatively unimportant in other years.

3/ Production for 1943 consists of salmon only; there was no production of stockfish and statistics for shark fins are not available.

4/ Includes 437 thousand pounds, valued at 146 thousand dollars imported from Iceland.

Source: Production from statistics of the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
Cents per pound			

Par. 717(c)

Fish dried and unsalted:

Cod, haddock, hake, pollock, and cusk <u>1/</u> -----	2-1/2	2/1-1/4	CANADA
Shark fins -----	1-1/4	2/3/5/8	NORWAY
Other <u>1/</u> -----	1-1/4	2/ 5/8	NORWAY

1/ Stockfish (dried, unsalted cod) was held dutiable as "Other fish, dried and unsalted" (T.D.45672), effective May 1932. Decision was reversed (C.D.740), effective February 1943.

2/ Trade agreement with Iceland, effective November 1943.

3/ Duty reduced to 3/4 cent per pound in trade agreement with Mexico, effective January 1943; duty further reduced to 5/8 cent per pound, as shark fins were included with "other" fish in the trade agreement with Iceland, effective November 1943.

Note.- The ad valorem equivalent of the duties on imports in 1939 (when the specific rates were double those now in effect) were 24 percent on cod, haddock, hake, pollock, and cusk; and 10 percent on the combined imports of shark fins and other fish.

## FISH, DRIED AND UNSALTED--Continued

Comment

United States production of dried and unsalted fish consists chiefly of salmon produced in Alaska and shark fins produced in Florida and California. There is also a small production of stockfish (a dried and unsalted cod product) in Alaska. On the Atlantic coast there is a small and sporadic production of sun-dried squalene (sea trout). Insignificant quantities of other dried fish are prepared in the Hawaiian Islands and the Pacific Coast States, but production statistics are not available. Reported production in specified years was as follows:

Fish, dried and unsalted: United States production, by kinds, 1937, 1939, and 1943

Item	1937		1939		1943	
	Quantity	Value	Quantity	Value	Quantity	Value
	Pounds		Pounds		Pounds	
Stockfish -----	22,043	\$3,013	5,800	\$741	-	-
Salmon -----	1,148,000	79,900	456,000	36,500	718,600	\$38,793
Shark fins -----	30,263	13,388	46,485	18,861	n.a.	n.a.
Total -----	1,200,306	96,301	508,285	56,102	718,600	38,793
	:	:	:	:	:	:

Source: Official statistics of the U. S. Fish and Wildlife Service.

Before the war imports averaged about 3.4 million pounds annually valued at 1/3-million dollars. About 60 percent of total imports came from Norway, 30 percent from Japan, and 10 percent from other countries. Practically all imports from Norway were stockfish; those from Japan were "stick" cod and oriental specialties. The remaining imports consisted of shark fins (principally from Mexico) and specialty products from various sources. The relatively small imports from Canada consisted principally of dried and unsalted cod and related species. The value of imports by principal sources in specified years was as follows:

Fish, dried and unsalted: United States imports for consumption, by kind, and principal sources, 1939 and 1943

Item	Year	Value	Source
Dried and unsalted, total -----	1939	\$386,337	NORWAY, \$233,856; Japan, \$96,602
Dried and unsalted:	1943		
Cod, etc. -----		134,106	Iceland, \$134,096
Shark fins -----		38,489	Mexico, \$31,906
Other -----		19,632	Iceland, \$11,663; Mexico, \$4,193
Total -----	1943	192,227	Iceland, \$145,759; Mexico, \$36,099
	:	:	:

Source: Official statistics of the U. S. Department of Commerce.

## FISH, DRIED AND UNSALTED-Continued

Stockfish is consumed in the United States almost entirely by Latins and Scandinavians, and "stick" cod and shark fins by orientals. Dried salmon is used principally in Alaska, as food for human consumption and as food for dogs, mink, and foxes.

Of the products under consideration for negotiations stockfish and shark fins are perhaps the only imported items which compete directly with domestic products. However, domestic production of stockfish has never been large, notwithstanding an almost unlimited supply of raw material (fresh cod) in Alaskan waters. In 1926 and 1931, the 2 years of largest Alaskan production, the Alaskan industry supplied less than 10 percent of the total United States consumption of stockfish.

Domestic production of shark fins amounted to 46 thousand pounds in 1939 and 24 thousand pounds in 1940. No production was reported for 1941 and 1942; production data for subsequent years are not available. Imports, separately reported only since 1942, have averaged 212 thousand pounds annually, with Mexico supplying more than three-fourths of the total.



## FISH IN OIL: SARDINES

(See separate digest on sardines, not in oil, par. 718(b))

Stat. import classes (1939): 0063.2 and 0063.3

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports	Imports for consumption from--				
			All countries	NORWAY	Portugal	Sweden	Latvia
Quantity (1,000 pounds)							
1937 -	36,698	Not available 1/	28,727	22,594	4,107	203	804
1938 -	14,664		21,854	15,850	3,852	336	789
1939 -	48,710		31,657	23,730	6,030	468	651
1943 -	26,946		413	-	397	-	-
Value (1,000 dollars)							
1937 -	4,421	Not available 1/	3,843	2,859	658	30	105
1938 -	2,222		3,220	2,163	706	58	101
1939 -	6,326		4,663	3,374	962	88	84
1943 -	6,297		152	-	145	-	-

1/ Exports of sardines packed in oil ordinarily account for less than 5 percent of the total domestic pack.

Source: Production statistics from the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
	Percent ad valorem		
Par. 718(a)			

Fish prepared or preserved in any manner, when packed in oil or in oil and other substances:

## Sardines:

Valued not over 9 cents per pound	30	1/2/ 44	NORWAY
Valued over 9 cents per pound	30	2/ 30	do.

1/ By Presidential proclamation under section 336 of the Tariff Act of 1930, effective January 1934.

2/ Sardines packed in refined herring oil are subject to an additional import-excise tax of 1½ cents per pound on the quantity of oil introduced in the cans (Internal Revenue Code, section 2491, as modified) if the oil amounts to 10 percent or more of the contents by weight.

Comment

The term "sardines," now a household word in most countries, is usually associated with small fishes preserved in oil, or other sauces, in hermetically sealed tins. This generic use of the term has led to the erroneous belief that the sardine is a single and distinct species of fish, whereas several species (belonging chiefly to the family Clupeidae) are canned and sold as sardines. Two species belonging to the genus Clupea and four species belonging to Sardina constitute almost the entire world pack of sardines. In the eastern United States and Canada sardines packed in oil are produced from herring (Clupea harengus); the United States Pacific coast product is derived from pilchards (Sardina caerulea). The principal fish used for this purpose in France, Spain, and Portugal is the

## FISH IN OIL: SARDINES-Continued

pilchard (Clupea pilchardus); Norway uses the brisling or sprat (Clupea sprattus) and the sild or musse (Clupea harengus); Japan uses a species of pilchard, (Sardinella melanosticta). The Mediterranean pilchard (Sardina sardina) is also canned in several European and north African countries. In the United States most of these products are marketed in varying quantities as sardines, in accordance with general usage and with the definition adopted by the United States Food and Drug Administration, which holds that the word "sardines" may be applied to canned small fish of species belonging to the family Clupeidae. In some countries, however, the name "sardines" may be applied only to fish packed from the genus Sardina and from the species Clupea pilchardus; the products of other species being labeled brisling, sild, herring, etc.

Before the war olive, cottonseed, peanut, sesame, soybean and other oils were used in packing sardines in oil. In most foreign countries the use of olive oil was general, whereas in the United States cottonseed oil predominated. During and since the war, however, the shortage of olive and cottonseed oils forced packers in some countries to curtail production and in some others to shift to the use of other oils. Olive oil is still used almost exclusively in Spain and Portugal, but Norwegian packers have developed a refined herring oil which has proven acceptable to the trade and probably will continue to be used, at least with the lower-priced products, even after olive oil again becomes available. In 1939, 97 percent of the United States pack was in cottonseed oil; but in 1944 soybean oil was used for 85 percent of the total production.

Although sardines consumed in the United States are packed in tins of varying sizes, the great bulk of both the domestic and imported products are packed in "No. 1/4" cans labeled as containing from 3-1/4 to 4 ounces net weight. There is, however, a wide variety in the type or style of pack, e.g., oil used, method of dressing and preparing the fish, number of fish to the can, etc. For example, before the war none of the domestic pack was smoked, whereas substantially all imports from Norway were lightly smoked. Virtually none of the domestic pack was boneless, or skinless and boneless fish, but these constituted the bulk of the imports from Portugal.

Domestic production of sardines packed in oil is confined almost entirely to Maine and California, with the former accounting for about 96 percent of the total. The great bulk of the production in Maine consists of sardines packed in oil; relatively negligible quantities are packed in mustard or in tomato sauce. In California, however, only insignificant quantities are packed in oil; most of the production there consists of sardines packed in tomato sauce, natural oil of the fish, or in mustard. (See digest on sardines not in oil, paragraph 718(b), which covers the products packed in natural oil, tomato, mustard, and other sauces).

The industry in Maine obtains part of its supply of raw material (fresh sea herring) free of duty from Canada; the quantity imported usually depends on the relative abundance or scarcity of suitable fish in domestic and Canadian waters. In 1932 imports through the Maine and New Hampshire customs district were only 11 million pounds; in 1942 they amounted to about 57 million pounds. From 75 to 95 percent of these imports are taken by the sardine canners in Maine.

Variations in the supply of fish suitable for canning in the United States and Canada, price changes, stocks on hand, volume of imports, and prices of the imported products, are factors responsible for the wide year-to-year fluctuations in the domestic pack. Domestic production, which reached 62 million pounds in 1904, dropped to 12 million pounds in 1932 and rose again to 68 million pounds in 1941, the largest pack of record.

During the prewar decade (1930-39), the annual domestic consumption of sardines packed in oil averaged about 57 million pounds, of which slightly more than half was supplied by imports. Whereas United States exports were negligible, the other principal producing countries were on a pronounced export basis, and shipped to many countries.

## FISH IN OIL: SARDINES-Continued

United States imports during the decade ending in 1939 ranged from 42 million pounds (1932) to 22 million pounds (1938) and averaged 30 million pounds. About three-fourths of the total imports came from Norway, one-sixth from Portugal, and most of the remainder from other European countries. Since 1943, however, Venezuela has become a relatively important supplier, with some other South American countries contributing small supplies.

Most imported sardines are different from most of the domestic in preparation and packing, and they have an established prestige value. This prestige makes it difficult for United States packers to market a fancy product inasmuch as consumers have come to judge the bulk of domestic sardines by the lower or cheaper grades which have predominated in the domestic pack. Therefore, when prices of the foreign product fall to the level of domestic prices of comparable grades (as was the case in the early 1930's), consumers purchase proportionately more imported sardines.

In terms of quality and price, domestic and imported sardines may be divided into three broad classifications:

(1) Higher-priced sardines, notably the better grades imported from Norway, Portugal, and France. Before the war these constituted from 75 to 90 percent of the total imports, but never exceeded 5 percent of total domestic production of all sardines in oil.

(2) Medium-priced sardines, principally the lower grades produced in Norway and Portugal. These constitute from 10 to 25 percent of total imports and 10 or 20 percent of the domestic pack.

(3) The lower-priced product which accounted for 75 to 90 percent of the domestic pack; sardines of this grade were imported in negligible quantities.

Although the extent of competition between the domestic and imported products has been influenced by the differences in the various types or grades of sardines produced here and abroad, price has been an important factor. After Norway and Portugal went off the gold standard in 1931 and 1932, respectively, the price of the medium and lower grade imports from those countries dropped to about the level of the better grade Maine pack. After the United States suspended gold payments early in 1933, however, the foreign value of the dollar gradually approached the former par of exchange with currencies of those countries and the previous price differentials were restored.

The practicability of preparing a domestic product that will sell within the price range of the so-called fancy imported sardines has been demonstrated, but largely because of the higher labor cost and because domestic processing plants are geared principally to mass production of the cheaper grades, it has been difficult to increase appreciably the United States output of the higher cost quality product. However, in July 1944, Fish and Wildlife Service of the Department of the Interior, undertook a comprehensive study of the sardine-canning industry in Maine, with a view to developing improved methods of processing and packing. The technological work undertaken in Maine is still in progress; should these efforts be attended with some measure of success, production of higher quality sardines in the United States will encounter keen competition from imports, particularly those classified under (1) and (2) above. Regardless of the outcome, however, the predominant share of domestic production will probably continue to be sardines of a grade and price imported into the United States in relatively small quantities.

By Presidential proclamation, effective January 1934, the duty on sardines (and certain other fish) packed in oil was increased from 30 percent to 44 percent ad valorem, if of a value not exceeding 9 cents per pound including the weight of the immediate container. Those of a value exceeding 9 cents per pound remained dutiable at 30 percent. Sardines in the lower value bracket accounted for 11 percent of the quantity and 8 percent of the value of total imports during the

## FISH IN OIL: SARDINES-Continued

remainder of 1934. From then through 1939 such imports never exceeded 3 percent of the quantity and 2 percent of the total value of imported sardines in any year. With the higher prices which have prevailed since 1939, all imports of sardines have been valued at more than 9 cents per pound.

As has been noted, the United States before the war produced nearly 50 percent of its total consumption of sardines packed in oil. Virtually all of the United States back has been of the type which competes with imports in the lower price range.

Sardines imported in the higher price ranges generally have encountered little direct competition from United States products. With lower prices than now prevail, however, imports of the higher quality sardines would compete more directly with a larger volume of domestic production.

The next few years will probably be a period of marked readjustment for the sardine industry in all countries. It is doubtful whether world markets outside the United States will be able to purchase imported sardines in volumes approaching prewar levels. Until the other major importing countries resume their former place in the market, the United States will probably provide the most favorable outlet for foreign sardines.

While a separate statistical classification for sardines has been established, the fact that sardines are prepared from several species of fish raises a question as to the feasibility of administering a tariff classification for sardines. The specification of sardines in former tariff acts caused considerable administrative difficulty and led to protracted litigation, and in its report to the President of its investigation under section 336 (October 1933) which resulted in the breakdown of the fish-in-oil classification into "tuna" and "other fish," the Tariff Commission pointed out that while the principal classes of fish packed in oil consisted of tuna and sardines, it was impracticable to use the term "sardines" for tariff purposes. However, it is possible that in recent years the term "sardine" may have become sufficiently definite to render the administration of a tariff provision for sardines reasonably feasible.

## FISH IN OIL: OTHER THAN SARDINES, ANCHOVIES, TUNA, AND ANTIPASTO

Stat. import classes (1939): 0066.6 and 0066.7

United States production, exports, and imports, 1937-39 and 1943

Year	Production <sup>1/</sup>	Domestic exports	Imports for consumption from--				
			All countries	CHINA	Norway	Japan	CANADA
Quantity (1,000 pounds)							
1937 -	5,164	Not available	2/ 550	24	87	203	2/
1938 -	5,803		381	97	49	78	7
1939 -	5,422		4/ 377	132	90	43	3/
1943 -	2,591		4/ 641	2	-	--	3/
Value (1,000 dollars)							
1937 -	1,081	Not available	2/ 117	4	12	58	3/
1938 -	1,041		80	16	6	24	2
1939 -	932		4/ 67	20	12	12	3/
1943 -	925		4/ 162	1	-	-	3/

1/ Consists of bonito and yellowtail.

2/ Includes 170 thousand pounds valued at 28 thousand dollars imported from Hong Kong.

3/ Less than 500.

4/ Includes 556 thousand pounds valued at 128 thousand dollars imported from Peru; and 60 thousand pounds valued at 23 thousand dollars from Chile.

Source: Production statistics from the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
	Percent ad valorem		

## Par. 718(a)

Fish, prepared or preserved in any manner, when packed in oil or in oil and other substances:

## Smoked pollock:

Valued not over 9 cents per pound 30 1/ 44

CANADA  
do.

Valued over 9 cents per pound 30 2/ 15

## Other (except tuna, sardines, anchovies, and antipasto):

Valued not over 9 cents per pound 30 1/ 44

CHINA  
do.

Valued over 9 cents per pound 30 30

1/ Presidential proclamation under section 336 of the Tariff Act of 1930, effective January 1934.

2/ Trade agreement with Iceland, effective November 1943.

CommentSmoked pollock

This product (also marketed as sea salmon, saithe, and coalfish) is a specialty item not produced in the United States. Although the fishermen of this country land large quantities of pollock, the great bulk of the catch is marketed as fresh and frozen fillets and the small remainder is pickled or salted.

## FISH IN OIL: OTHER THAN SARDINES, ANCHOVIES, TUNA, AND ANTIFASTO-Continued

Smoked pollock in oil, as imported, is usually packed in 3-3/4-oz. cans (similar to the sardine can), and available data indicate that the principal foreign producing countries have been Iceland and Denmark. In the trade agreement with Iceland, effective November 19, 1943, the duty on this product was reduced from 30 percent ad valorem to 15 percent, if of a value exceeding 9 cents per pound, including the weight of the immediate container. The duty on imports valued at not more than 9 cents per pound remained at 44 percent; but there were no imports under this classification. Imports were not separately shown prior to the Iceland agreement, but an analysis of invoices and other entry papers revealed that Iceland supplied 33,237 pounds of smoked pollock in 1940 and 2,400 pounds in 1941. Since the Iceland agreement there have been no imports from any source, notwithstanding the duty reduction, probably owing to the inability to obtain tin cans and oil.

So far as is known Canadians have never produced smoked pollock packed in oil, their relatively small catch of these fish having been marketed in other forms.

#### Other fish

Domestic production of fish packed in oil covered by this classification consists almost entirely of bonito and yellowtail, tuna-like fish that are put up by California packers engaged primarily in canning tuna. Under Federal regulations these two products may not be labeled tuna. They are, however, packed in the same manner as tuna, are used in similar prepared dishes, and some consumers purchase them as substitutes for tuna.

Imports under this classification consist almost entirely of bonito, yellowtail, herring, eels, mackerel, salmon, hors d'oeuvres, and specialty products consumed principally by orientals.

Before the war most of the imports from European countries were herring, eels, mackerel, and hors d'oeuvres; those from Asiatic countries were oriental products and salmon. Imports of bonito and yellowtail in oil, if any, were negligible. However, there are large supplies of these species of fish along almost the entire coast of Mexico, Central and South America, and during the war canneries were erected in some of these countries, notably Peru and Chile. As a result, in 1943, imports into the United States from Peru and Chile amounted to 616,000 pounds valued at \$151,000, practically all of which was bonito packed in oil.

Since January 1934 all of these products have been dutiable at 44 percent ad valorem if of a value not exceeding 9 cents per pound, including the weight of the immediate container, and 30 percent if of a value exceeding 9 cents per pound. In 1934 imports dutiable at the higher rate amounted to one-fourth of the quantity and one-eighth of the value of total imports. Since that year, however, annual imports at the higher rate have never exceeded 2-1/2 percent of the quantity nor 1 percent of the value of total imports. The decline in imports in the lower value bracket was influenced to some degree by the increased duty; but increasing prices of the imported products were the significant factor.

## SALMON, CANNED

Stat. import class (1939): 0067.1

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports	Imports for consumption from--			
			All countries	Japan	CANADA	
Quantity (1,000 pounds)						
1937 ---	362,642	37,979	6,713	762	5,478	
1938 ---	349,426	48,291	698	366	331	
1939 ---	287,621	40,766	928	350	577	
1943 ---	273,802	1/ 69,486	2/ 25	-	13	
Value (1,000 dollars)						
1937 ---	52,934	6,655	411	69	311	
1938 ---	42,366	7,269	68	46	21	
1939 ---	41,781	6,521	81	45	35	
1943 ---	62,935	1/ 18,014	2/ 6	-	3	

1/ Includes 69,120 thousand pounds valued at 17,915 thousand dollars exported under lend-lease.

2/ Free for Government use 6 thousand pounds valued at 1 thousand dollars; also includes dutiable imports of 11 thousand pounds valued at 3 thousand dollars from Argentina.

Source: Production statistics from the U.S. Fish and Wildlife Service; exports and imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
	Percent ad valorem		

## Par. 718(b)

Fish, prepared or preserved in any manner when packed in airtight containers weighing, with contents, not more than 15 pounds each (except fish packed in oil or in oil and other substances):

Salmon	25	25	CANADA
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Comment

Salmon are found in practically all coastal waters of the North Atlantic and North Pacific oceans. Of the total world catch, which averages over 1 billion pounds annually, 95 percent is taken in the North Pacific where the bulk of the salmon caught is canned. The small catch of salmon in the North Atlantic is practically all sold, fresh or frozen, in European and North American markets. The United States, Canada, Japan, and the Soviet Union have accounted for practically all of the North Pacific catch. Statistics are not available relative to the Soviet catch, but it is believed that in prewar years it amounted to about 20 percent of the world total; the United States accounted for about 50 percent, and Japan and Canada each for about 15 percent. Most of the Japanese catch was taken under concession in Soviet territorial waters. Acquisition by the Soviet Union of Lower Sakhalin (Karafuto) and the Kuriles now brings most of the salmon fishing grounds formerly in Japanese territorial waters under the control of the Soviet Union.

## SALMON, CANNED-Continued

World markets depend upon the North Pacific catch for their supplies of canned salmon. The total catch, and the catch by countries and by species, are subject to wide fluctuations depending on the life cycle and seasonal runs of the fish; consequently there are considerable fluctuations in the annual pack of canned salmon. The annual world pack ranged from about 400 to 650 million pounds during the 1930's, averaging about 515 million pounds. The United States accounted for about two-thirds of the pack. Canada and Japan, roughly of equal importance as producers, canned most of the remainder. The Soviet Union, for which statistics of production are not available, is believed to have been the smallest producer of canned salmon. The total prewar pack from salmon caught in Soviet territorial waters, including that caught there by the Japanese, was probably larger than that of Canada. Thus, if the Soviet Union chooses, it can now, on the basis of available supplies in Soviet waters, easily become the second largest producer of canned salmon; in which event Japan, without access to Soviet fishing grounds, will become a relatively unimportant producer.

All four producing countries have been on an export basis for canned salmon, but United States exports, before the war, in no year exceeded 15 percent of its great production. In contrast, Canada exported from two-thirds to four-fifths of its output and approximately 90 percent of the production of Japan and the Soviet Union was for export markets. The United Kingdom was the principal export market for all producing countries. The United States also had appreciable markets in the Philippine Islands, Netherlands East Indies, and certain European and Central American countries; Canada, in countries within the British Commonwealth of Nations; and Japan and the Soviet Union, in European countries.

Since 1930, annual imports into the United States have not exceeded 3 percent of domestic consumption. Marked fluctuations have occurred in the total imports and also in the quantities imported from the principal suppliers. During the 10 years ending 1940 total imports ranged from 137,000 pounds in 1931 to 6,713,000 pounds in 1937, with Canada supplying 75 percent and Japan 22 percent of the total during the 10-year period. In 1937 Canada supplied 82 percent of the total imports and Japan 11 percent; but in 1940 Canada supplied only 2 percent and Japan 97 percent. Most of the imports from Japan entered Hawaii and consisted mainly of the "titbit" and "belly" grades of red salmon for consumption by Orientals in the islands. Practically all imports from Canada were comparable to the domestic pack and were entered for consumption in continental United States.

Three factors are largely responsible for the insignificance of United States imports of canned salmon: (1) the large domestic production; (2) an exportable surplus from substantially every year's pack; and (3) the duty of 25 percent on the imported product.

Approximately 90 percent of the United States pack is in Alaska by canneries located along the coast from the southeastern tip of the Territory to and including Bristol Bay. Substantially all supplies used and most of the labor employed in the Alaskan industry has to be transported by vessel from Seattle to the canneries at the beginning of the canning season each year, and the pack is transported from the canneries principally to Washington and Oregon for domestic distribution and export. Canadian production is confined almost entirely to British Columbia, where canneries are located in a relatively restricted area on the mainland or the islands adjacent thereto. This obviates the necessity of long hauls of supplies to canneries and of the finished product to primary centers of distribution. These advantages indicate lower costs of production and marketing for British Columbia than for Alaska.

## SALMON, CANNED-Continued

It is doubtful if the United Kingdom and continental Europe, which together accounted for the great bulk of world imports of canned salmon before the war, will be able to resume purchases at prewar volume for several years. Meanwhile, if world production is maintained, it is likely that, notwithstanding some expansion in other non-European markets, there will be considerable incentive to enlarge exports to the United States.



## FISH CAKES, BALLS, AND PUDDING

Stat. import class (1939): 0067.3

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports	Imports for consumption from--			
			All countries	NORWAY	Japan	Iceland
Quantity (1,000 pounds)						
1937 ----	5,246	Not avail-	2,188	1,437	731	-
1938 ----	4,669	avail-	1,648	1,097	531	-
1939 ----	5,466		1,539	1,038	470	14
1943 ----	1/ 3,935	able	40	-	-	40
Value (1,000 dollars)						
1937 ----	753	Not avail-	152	86	64	-
1938 ----	665		131	77	52	-
1939 ----	757		120	70	47	1
1943 ----	1/ 650	able	6	-	-	6

1/ Production statistics are for 1942, the latest available data.

Source: Production statistics from the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff			Proposed negotiating country	
	Act of 1930	1945			
		Percent	ad valorem		
Par. 718(b)					

Fish, prepared or preserved in any manner, when packed in airtight containers weighing, with contents, not more than 15 pounds each (except fish packed in oil or in oil and other substances):

Fish cakes, balls, and pudding ---- 25 1/12 1/2

NORWAY

1/ Trade agreement with Iceland, effective November 1943.

Comment

Fish cakes, fish balls, and fish pudding are products in which fish is the principal ingredient. All products covered by this classification enter the trade cooked and packed in tins, requiring relatively little further cooking in their preparation for the table.

Fish cake material, as prepared in the United States, is a cooked mixture of shredded salt cod, potatoes, (ratio of 100 pounds freshened salt cod to 200 pounds potatoes) hydrogenated coconut oil, and white pepper. This product, sold as fish cakes, codfish cakes, and under trade names, is packed usually without being formed into cakes.

## FISH CAKES, BALLS, AND PUDDING--Continued

Fish balls (Norwegian style) are also produced in the United States, the formula requiring fresh haddock, milk, fish broth, potato flour, wheat flour, salt, nutmeg, and ginger. Cooked to a paste this material is formed into small balls which are hand packed in cans filled with fish broth.

Fish pudding as produced in Japan consists of ground fish, salt, sugar, and mavin a liquor similar to vermouth. It is boiled or steamed and then slightly baked before packing. There is no known domestic production.

United States production of the two products, fish cake material and fish balls, centers principally at Gloucester, Mass., and at Portland and Eastport, Maine, where only a small part is prepared according to the foreign method, the bulk being fish cake material.

No data are available with respect to exports, but they are known to be negligible.

Norway (the principal source of prewar imports) the United States, Canada, and other countries having large supplies of potatoes and fish of the cod family--principally cod and haddock--are in a position to prepare increasing quantities of fish cakes and fish balls provided a market can be found for them.

FISH CANNED, NOT IN OIL: HERRING, SMOKED OR KIPPERED OR IN TOMATO SAUCE IN CONTAINERS WEIGHING, WITH CONTENTS, MORE THAN 1 POUND EACH  
 (See separate digest on sardines and other herring, par. 718(b);  
 also digests covering fish packed in oil, par. 718(a))

Stat. import class (1939): 0067.6

United States production, exports, and imports, 1937-39 and 1943

Year	Production <sup>1/</sup>	Domestic exports	Imports for consumption from--			
			All countries	UNITED KINGDOM	Norway	
Quantity (pounds)						
1937	n.a.		n.a.			
1938	n.a.		n.a.			
1939	n.a.		991,572	642,574	345,643	
1943	584,901	Not available	2/ 34,414	-	-	
Value (dollars)						
1937	n.a.		n.a.			
1938	n.a.		n.a.			
1939	n.a.		93,334	64,363	28,514	
1943	77,388	Not available	2/ 3,573	-	-	

<sup>1/</sup> War production nil or small. See text.

<sup>2/</sup> Nearly all imported from Canada and entered free as an act of international courtesy.

Source: Production statistics from the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
	Percent ad valorem		

Par. 718(b)

Fish, prepared or preserved in any manner, when packed in air-tight containers weighing, with contents, not more than 15 pounds each (except fish packed in oil or in oil and other substances):

Herring, smoked or kippered or in tomato sauce, packed in immediate containers weighing with their contents more than

1 pound each <sup>25</sup> <sub>1/</sub> 15

UNITED KINGDOM

<sup>1/</sup> Trade agreement with the United Kingdom, effective January 1939.

Comment

Domestic production of canned herring (as distinguished from sardines) is a new development begun during the war, and is confined almost entirely to Maine and Massachusetts. Only 20 to 25 percent of the total production comes within the range of the above tariff classification; this part consists almost entirely of kippered herring and herring in tomato sauce, both packed in cans containing 14-16 ounces net weight. The principal domestic product (excluded from this classification) is herring packed in natural oil (see digest covering sardines and other herring, par. 718(b)), most of which was sold to the Government for exportation under the lend-lease program.

FISH CANNED, NOT IN OIL: HERRING, SMOKED OR KIPPERED OR IN TOMATO SAUCE IN CONTAINERS WEIGHING, WITH CONTENTS, MORE THAN 1 POUND EACH-Con.

Before the war imports came almost entirely from the United Kingdom and Norway. Most of them were packed in flat oval cans containing 14-16 ounces net weight. Imports consisted almost entirely of three products (1) herring in tomato sauce, (2) kippered herring in natural oil, and (3) kippered herring in tomato sauce. The bulk of the imports have always sold for substantially higher prices than the bulk of the domestic pack. This is particularly true with respect to the kippered herring packed in tomato sauce, imported principally from the United Kingdom.

FISH CANNED, NOT IN OIL: SARDINES AND HERRING,  
EXCEPT HERRING SMOKED OR KIPPERED OR IN TOMATO SAUCE, ETC.  
(See separate digest par. 718(b) and digests covering fish  
packed in oil par. 718(a))

Stat. import class(1939): 0067.7

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports <sup>1/</sup>	Imports for consumption from--				
			All countries	NORWAY	Sweden	United Kingdom	Iceland
Quantity (1,000 pounds)							
1937	140,382	51,998	2/ 11,792	9,840	447	757	-
1938	110,688	40,812	2/ 9,150	7,243	376	893	-
1939	155,740	56,813	3/ 8,885	7,740	482	264	-
1943	174,301	3/ 139,653	4/ 741	-	-	-	103
Value (1,000 dollars)							
1937	9,183	3,462	2/ 908	687	63	87	-
1938	7,247	2,786	2/ 778	571	52	103	-
1939	10,303	3,870	3/ 813	681	68	32	-
1943	19,082	3/ 20,533	4/ 240	-	-	-	30

<sup>1/</sup> Includes small quantities of sardines in oil and herring smoked, etc.

<sup>2/</sup> Includes herring smoked, etc.

<sup>3/</sup> Includes 133,938 thousand pounds valued at 19,825 thousand dollars exported under lend-lease.

<sup>4/</sup> Principally from Canada and Portugal.

Source: Production statistics from the U. S. Fish and Wildlife Service; exports and imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
	Percent ad valorem		
Par. 718(b)			
Fish prepared or preserved in any manner, when packed in airtight containers weighing, with contents, not more than 15 pounds each (except fish packed in oil or in oil and other substances):			
Sardines and herring (except herring, smoked or kippered or in tomato sauce, packed in immediate containers weighing with their contents more than one pound each)-- 25	1/	12½	NORWAY
1/ Trade agreement with Iceland, effective November 1943.			
	<u>Comment</u>		

Sardines and herring, not in oil, packed in airtight containers (canned) consist mainly of the following products:

(1) California, British Columbia, and Japanese pilchards, packed in tomato sauce, mustard sauce, or in the natural oil of the fish. Although these products are generally labeled sardines, a small part of the domestic output and indeterminate quantities produced abroad are labeled pilchards.

FISH CANNED, NOT IN OIL! SARDINES AND HERRING,  
EXCEPT HERRING SMOKED OR KIPPERED OR IN TOMATO SAUCE, ETC.-Continued

(2) Maine small herring, packed in mustard sauce or in tomato sauce, and large herring whether kippered, spiced, packed in the natural oil of the fish or in tomato sauce. The smaller herring thus packed are labeled sardines, whereas the larger are labeled herring.

(3) Norwegian, Swedish, British, and Canadian herring, whether kippered, packed in tomato sauce, or kippered and packed in tomato sauce. Although some of these products are labeled sardines, the great bulk of them are labeled herring, with a qualifying phrase denoting the type of pack, e.g., kippered snacks, herring in tomato sauce, or Norwegian kippers.

(4) European species of the herring and pilchard family packed in various sauces and in the natural oil of the fish. These products are usually labeled sprats, sardines, gaffelbiter, etc.

The relatively insignificant domestic production of canned herring is confined almost entirely to Maine; the production of sardines (not in oil) is confined to Maine and California. In Maine, the pack is produced entirely from small sea herring, by canneries also packing sardines in oil. In California the pack of sardines not in oil is put up entirely from pilchards, either by plants also packing sardines in oil and manufacturing fish oil and meal or by those engaged in canning tuna, mackerel, and other products. About three-fourths of the total domestic output of sardines consists of sardines not in oil and only one-fourth of sardines in oil (see digest on sardines packed in oil, par. 718(a)). California accounts for more than nine-tenths of the United States production of sardines not in oil, and Maine for almost all of the remainder. The bulk of the production in California is about equally divided between sardines packed in tomato sauce and those packed in the natural oil of the fish. In Maine the bulk of the production was formerly packed in mustard sauce; during the war, however, sardines in tomato sauce constituted the bulk of the pack. Most of Maine's wartime output of sardines in tomato sauce was sold to the Government for distribution under the lend-lease program.

The size of the total annual pack is almost entirely dependent on the production in California. In that state the annual output of sardines not in oil is determined largely by (1) the catch of pilchards, (2) the relative price of and demand for sardines not in oil, as against those for fish oil and meal, and (3) State regulations governing the utilization of the catch. In the early 1930's, the State required that approximately a third of the catch of pilchards be utilized for canning; the remaining two-thirds, together with the waste from the canning plants could be used in the manufacture of meal and oil. These regulations have been amended from year to year. Nevertheless, the production of sardines not in oil has increased markedly, somewhat in proportion to the annual catch of pilchards, which increased from about a half billion pounds in the early 1930's to about a billion pounds in the latter part of the decade and in the period 1940-44.

California's production of sardines not in oil reached a peak of 183 million pounds in 1929, dropped to 46 million pounds in 1932, and then established a record of 240 million pounds in 1941. Since then it has varied from 151 million pounds (1943) to 170 million pounds (1945).

Before the war (1930-39) approximately 40 percent of the domestic production of sardines not in oil was exported, the principal markets being the Philippine Islands and the United Kingdom. There were, however, other important outlets, principally European and Asiatic countries, but as Japan expanded its production and exports to most of these markets, United States exports gradually declined to approximately half their former volume. During the war, exports increased markedly but most all of these exports consisted of shipments under lend-lease or by UNRRA.

FISHED CANNED, NOT IN OIL: SARDINES AND HERRING,  
EXCEPT HERRING SMOKED OR KIPPERED OR IN TOMATO SAUCE, ETC.-Continued

Annual imports of canned sardines and herring not in oil have never exceeded 13 million pounds. In the decade before the war they supplied about 12 percent of domestic consumption; they were less than a fifth of the quantity exported. Imports consisted principally of kippered herring in natural oil (kippered snacks) largely from Norway, and herring in tomato sauce from the United Kingdom and Norway; the average foreign unit value of imports was considerably higher than that of the domestic pack of sardines and herring (not in oil) considered as a whole. When the war shut off imports from Norway, the United Kingdom, and other sources, Canada increased its production of kippered snacks, prepared and packed like the Norwegian product. Since 1942, imports of these items have entered the United States in increasing quantities. Total imports of herring and sardines not in oil from Canada in 1945, amounted to 1 million pounds, most of which are believed to have been kippered snacks. Canadian producers are expected to exert every effort to hold this trade in postwar years.

There is no domestic production of canned kippered herrings (kippered snacks); the closest comparable domestic product is smoked fillets of sardines (pilchards) packed in natural oil. Domestic output of herring in tomato sauce is relatively insignificant; imports of this product are somewhat similar to the large California pack of sardines (pilchards) in tomato sauce. There is, however, a substantial spread between the prices of the domestic and imported products. California sardines in tomato sauce are a relatively low-priced product which sells at the general price level of California canned mackerel and the cheaper grades of canned salmon.

It would appear that sustained domestic production of sardines and herring not in oil will be influenced more directly by the ability of the industry to recover prewar export markets than by the volume of postwar imports.



## FISH CANNED, NOT IN OIL, OTHER THAN ANCHOVIES, SALMON, HERRING, SARDINES, AND FISH CAKES, BALLS, AND PUDDING

Stat. import class (1939): 0067.9

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports	Imports for consumption from--				
			All countries	Japan	Norway	CHINA	United Kingdom
Quantity (1,000 pounds)							
1937	45,894	418	1/ 1,899	1,053	334	86	31
1938	52,574	n.a.	1,138	683	111	116	24
1939	46,912	2,081	2/ 1,071	540	251	134	8
1943	50,939	2/ 25,133	3/ 264	-	-	4/	-
Value (1,000 dollars)							
1937	3,298	76	1/ 243	131	31	16	5
1938	3,551	n.a.	159	93	10	20	5
1939	3,225	190	3/ 162	97	24	21	1
1943	6,874	2/ 3,558	3/ 65	-	-	4/	-

1/ Includes 200 thousand pounds valued at 7 thousand dollars, imported from Hong Kong.

2/ Includes 24,980 thousand pounds valued at 3,510 thousand dollars, exported under lend-lease.

3/ Includes 251 thousand pounds valued at 60 thousand dollars, imported from Canada.

4/ Less than 500.

Source: Production statistics from the U. S. Fish and Wildlife Service; exports and imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
	Percent ad valorem		
Par. 718(b)			
Fish, prepared or preserved in any manner, when packed in airtight containers weighing, with contents, not more than 15 pounds each (except fish packed in oil or in oil and other substances):			
Other than anchovies, salmon, herring, sardines, and fish cakes, balls, and pudding	25	1/ 12½	CHINA
1/ Trade agreement with Iceland, effective November 1943.			

Comment

This classification covers all canned fish provided for in paragraph 718(b) of the Tariff Act of 1930, as modified, except anchovies, salmon, sardines, herring, and fish cakes, balls, and pudding.

Domestic production consists almost entirely of canned mackerel, alewives, shad, and fish flakes; mackerel ordinarily accounts for about four-fifths of the total and the other products specifically referred to for most of the remainder. Practically the entire United States pack of mackerel and shad is produced in California; that of alewives is put up in Maryland, Virginia, and North Carolina; and fish flakes (mainly from haddock) are prepared almost exclusively in Massachusetts and Maine. During the war canners began to put up relatively small packs of horse mackerel in California for lend-lease.

FISH CANNED, NOT IN OIL, OTHER THAN ANCHOVIES, SALMON, HERRING,  
SARDINES, AND FISH CAKES, BALLS, AND PUDDING-Continued

Annual exports of canned fish in this classification before the war varied sharply from year to year but never exceeded 5 percent of domestic production, and consisted almost entirely of canned mackerel. Because of their relatively low price, exports of canned mackerel generally went to countries taking the lower grades of canned salmon and canned sardines not in oil. During the war, however, most of the exports consisted of purchases by the Government under the lend-lease program. During these years total exports of items in this classification approximated half of the domestic production and consisted almost entirely of mackerel, alewives, and Pacific coast horse mackerel.

Before the war annual imports under this classification generally exceeded exports but did not exceed 2 million pounds in any year, the bulk of which came from Japan and other Asiatic countries. Most of these imports entered Hawaii and the Pacific coast States. The remainder consisted principally of specialties imported from Norway and the United Kingdom. During and since the war, however, there have been increasing imports from Canada and Newfoundland; although an invoice analysis has not been made, the available information indicates that they consist principally of canned cod from Newfoundland and fish flakes from Canada.

(See digest on salmon, smoked or kippered, par. 720(a)(1),  
statistical import class 0075.0)

Stat. import class (1939): 0068.0

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports	Imports for consumption from			
			All countries	CANADA	Japan	Newf. and Labrador
Quantity (1,000 pounds)						
1937	10,392	2,233	124	75	40	9
1938	13,565	2,162	225	193	14	6
1939	9,566	1,472	438	398	18	22
1943	1/ 12,852	18	1,120	1,078	-	42
Value (1,000 dollars)						
1937	1,965	387	12	8	3	1
1938	2,574	449	33	30	1	1
1939	1,773	302	81	77	2	2
1943	1/ 2,343	5	293	289	-	4

1/ Production statistics for 1940, the latest year for which data are available.

Source: Production from statistics of the U. S. Fish and Wildlife Service;  
exports and imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
		Percent ad valorem	

Par. 719

Fish, pickled or salted (except fish packed in oil or in oil and other substances and except fish packed in airtight containers weighing, with contents, not more than 15 pounds each):

(1) Salmon 25 1/ 12½ CANADA

1/ Rate reduced to 20 percent in first trade agreement with Canada, effective January 1936, and further reduced to 12½ percent in second agreement with Canada, effective January 1939.

Comment

This classification covers mild-cured salmon, pickled salmon, and dry-salted salmon. Mild-cured salmon accounts for 90 to 95 percent of total domestic production and pickled salmon for most of the remainder. Most of the pickled and dry-salted salmon is marketed as such, but substantially all mild-cured salmon is an intermediate product which is smoked before entering the usual channels of trade. United States production of pickled and dry-salted salmon is confined almost entirely to Alaska; mild-cured salmon is produced in the three Pacific Coast States and Alaska, with Washington and Alaska accounting for approximately one-third and one-half, respectively, of the total pack. Although official statistics of production since 1940 are not available, authoritative sources state that the packs of 1943 and 1944 were the smallest since 1918. Factors contributing to the sharp drop in production were the scarcity of skilled plant labor, short supplies of top grades of fresh fish, and the loss of export markets because of war conditions.

## SALMON, PICKLED OR SALTED-Continued

During the prewar decade ending in 1939, domestic production of mild-cured, pickled, and dry-salted salmon (consisting mostly of mild-cured) averaged 11 million pounds annually and ranged from 13.6 million pounds in 1938 to 9.6 million pounds in 1939, with production in other years very close to the average for the period. Almost one-fourth of the production was exported, principally to European countries with Germany the best market; exports averaged about five times as large as imports. Canada supplied about four-fifths of the total imports during the period and most of them consisted of mild-cured salmon.

The Soviet Union and Japan are important potential foreign sources of imports of mild-cured salmon because both countries have very large salmon fisheries. However, the great bulk of their catch is dry-salted for home consumption or canned for export, and it is doubtful if appreciable quantities of their future catches will be diverted to mild-curing.

The duty on pickled or salted salmon was reduced from 25 percent to 20 percent in the Canadian trade agreement effective January 1, 1936. Total imports amounted to 2 million pounds during the 3 years (1933-35) immediately preceding the agreement, but were only 613,000 pounds during the 3 years (1936-38) immediately following the reduction in duty. The duty was further reduced to  $12\frac{1}{2}$  percent effective January 1, 1939, and imports during the 3 years immediately following (1939-41) amounted to  $2\frac{1}{4}$  million pounds. The reduction in duty apparently had some influence upon the volume of imports during this period. However, Canada normally exports the bulk of its production of mild-cured salmon, principally to European countries and following the loss of most of those markets after 1939, the United States became the principal outlet for the Canadian product. This condition, perhaps more than the reduction in duty, was responsible for the increase in imports during 1939-41.

Although official statistics are not available, it is known that exporters in both the United States and Canada have, when necessary, bought from each other to fill export orders when there was a shortage in the domestic supply.

COD, HADDOCK, HAKE, POLLACK, AND CUSK,  
PICKLED OR SALTED (DRY-SALTED, GREEN-  
SALTED, AND BONELESS)-(SUMMARY DIGEST)

CANADA  
UNITED KINGDOM  
(Newfoundland)

Stat. import classes (1939): 0069.0, 0069.2, 0069.9

United States production, exports, and imports, 1937-39 and 1943

Year	Production 1/	Domestic exports 2/	Imports for consumption from--				
			All countries	CANADA	NEW-FOUNDLAND	Miquelon and St. Pierre	Japan
Quantity (1,000 pounds)							
1937	Not available	1,715	51,725	26,673	22,884	229	915
1938		1,656	48,203	20,754	25,836	230	752
1939		1,886	53,918	27,698	21,810	2,579	898
1943		240	3/ 43,420	19,431	23,466	-	-
Value (1,000 dollars)							
1937	Not available	120	2,367	1,178	1,082	.12	.41
1938		117	2,021	950	987	.8	.37
1939		130	2,257	1,205	852	.91	.57
1943	available	54	3/ 5,539	2,636	2,845	-	-

1/ Statistics of total United States production of green-salted, dry-salted, and boneless cod, haddock, etc., include considerable duplication because large (but unknown) quantities of imported green-salted fish are converted in this country into boneless fish (see comments in following three digests).

2/ Consists of salted, pickled or dry-cured cod and related species, but believed to be almost entirely dry-salted and green-salted fish.

3/ Free for Government use, 17,278 thousand pounds valued at 2,225 thousand dollars.

Source: Official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1920	1945 rate	
		Cents per pound	

Par. 719

Fish, pickled or salted (except fish packed in oil or in oil and other substances and except fish packed in airtight containers weighing with their contents, not more than 15 pounds each):

Cod, haddock, hake, pollock, and cusk:

(2) Neither skinned nor boned (except that the vertebral column may be removed):

Containing not more than 43 percent moisture by weight 1-1/4 1/ 5/8

Containing more than 43 percent moisture by weight 3/4 1/2/3/8

(3) Skinned or boned, whether or not dried 2 1/1-1/2

1/ Trade agreement with Canada, effective January 1939.

2/ Trade agreement with the United Kingdom, effective January 1939.

Note.— The equivalent ad valorem of the duties on imports were as follows: Containing not more than 43 percent moisture (5/8¢ lb.), 12 percent in 1939 and 5 percent in 1943; containing more than 43 percent moisture (3/8¢ lb.), 10 percent in 1939 and 3 percent in 1943; skinned or boned (1-1/2¢ lb.), 20 percent in 1939 and 5 percent in 1943.

COD, HADDOCK, HAKE, POLLACK, AND CUSK, PICKLED OR SALTED  
 (DRY-SALTED, GREEN-SALTED, AND BONELESS)—  
 (SUMMARY DIGEST)—Continued

Comment

Products covered by these 3 tariff classifications consist of pickled or salted cod, haddock, hake, pollock, and cusk, commonly referred to as cod and related species. Those containing not more than 43 percent of moisture (par. 719(2)) are known as dry-salted or hard-dried, those containing more than 43 percent of moisture (719(2)) are known as green-salted or wet-salted, and fish from which the skin and bones have been removed (719(3)) are known as boneless or absolutely boneless. These products will be referred to here as cod and related species, dry-salted, green-salted, and boneless respectively. (An important co-product of boneless cod is canned codfish cakes, covered by par. 718(b)).

Green-salted cod and related species are prepared by removing the head, viscera, and two-thirds of the backbone of the fresh fish and then heavily salting them. Carrying this process one step farther by drying produces the dry-salted product, the only substantial distinction between the two being the moisture content. The third kind, boneless cod (including filleted cod) is also produced from the green-salted fish (in the United States partly from domestic but chiefly from imported green-salted fish).

The domestic consumption of salted cod and related species has receded from former levels. About half of the consumption is now in Puerto Rico. As has been true of salted fish generally, demand in continental United States has shifted away from the salted to the fresh and frozen fish, which has become available in greater quantity since the advent of higher-speed vessels, refrigeration, and improved transportation and marketing facilities.

The centers of domestic production are in Massachusetts, Alaska, and Washington. The Massachusetts production is principally from surplus catches of fresh fish landed at Gloucester and Boston, and from green-salted fish landed principally in those ports duty-free from the treaty coasts of Newfoundland and Canada as products of American fisheries (See separate comment on green-salted). The small Alaskan production is from fresh fish landed at nearby shore stations. Washington production is from vessels operating in the Bering Sea off Alaska; here the fish are green-salted aboard the vessels and further processed after landing. Cod is the only one of the five species taken in the Pacific fishery.

Around the turn of the century more than half of the United States catch of cod and related species was salted for domestic and foreign markets. Despite increases in the catch, however, production of salted fish of these species has registered a substantial decline since the early 1900's, partly because of lost export markets, but primarily because improved transportation, refrigeration, and marketing facilities greatly expanded the domestic market for fresh and frozen fish and reduced the demand for salted fish. This development, especially packaged fillets, has furnished a more profitable outlet to fisherman and to processors than salting (see digest on fillets, par. 717(b)). Consequently, for its basic raw material (fresh fish) the domestic salting industry, with the exception of the small Pacific coast production and landings from the treaty coasts, is largely dependent upon sporadic gluts in the fresh and frozen market.

Imports from foreign countries, as a result, supplied about 80 percent of total domestic consumption of salted cod and related species in recent prewar years. Canada and Newfoundland accounted for practically all of the imports (95 percent), each supplying about half of the total. Canada supplied about one-half of the imports of green-salted fish, one-fourth of the dry-salted, and about 98 percent of the boneless; Newfoundland supplied nearly one-half of the imports of green-salted, and about two-thirds of the imports of dry-salted. The fishermen of these countries land enormous quantities of cod and related species; and notwithstanding increasing production of frozen fillets there, most of the catch is still salted for export.

COD, HADDOCK, HAKE, POLLOCK, AND CUSK, PICKLED OR SALTED  
(DRY-SALTED, GREEN-SALTED, AND BONELESS)-  
(SUMMARY DIGEST)--Continued

Published data are not available showing the United States imports of green-salted, dry-salted, and boneless fish separately by customs districts; but of the combined imports of the three products in 1939 (amounting to 54 million pounds) 41 percent entered continental United States through the customs districts of the New England States and New York, and 55 percent entered through the Puerto Rican customs district. Entries into Puerto Rico are practically all dry-salted and green-salted fish, which are consumed in the same condition as entered. Virtually all imports of boneless fish enter continental United States and are consumed as such, as are the imports of dry-salted. However, the great bulk of imports other than boneless entering through the New England and New York customs districts consists of green-salted fish used by the domestic industry in the manufacture of boneless cod, fibered cod, and canned cod fish cakes.

In the three digests following, the competitive status of each of the three classifications of salted cod and related species is discussed separately.



COD, HADDOCK, HAKE, POLLOCK, AND CUSK, PICKLED OR SALTED,  
 CONTAINING NOT MORE THAN 43 PERCENT MOISTURE BY WEIGHT (DRY-SALTED) Par. 719(2)  
 CANADA

Stat. import class (1939): 0069.0

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports <sup>1/</sup>	Imports for consumption from—				
			All countries	Newfoundland	CANADA	Japan	Norway
Quantity (1,000 pounds)							
1937	5,625	1,715	2,695	497	1,453	520	153
1938	5,606	1,656	6,142	3,721	1,701	413	141
1939	3,012	1,886	5,433	3,056	1,515	416	234
1943	2/ 3,379	240	3/25,002	19,302	5,695	—	—
Value (1,00 dollars)							
1937	345	120	150	25	78	30	11
1938	371	117	286	151	92	26	10
1939	183	130	286	140	81	36	15
1943	2/ 255	54	3/ 3,194	2,469	724	—	—

1/ Classified as cod, haddock, hake, pollock, and cusk, salted, pickled, or dry-cured, but believed to consist almost entirely of dry-salted and green-salted fish, principally dry-salted.

2/ Production statistics for 1940, the last year for which data are available.

2/ Free for Government use, 16,468 thousand valued at 2,121 thousand dollars.

Source: Production statistics from the U. S. Fish and Wildlife Service; exports and imports from official statistics of the U. S. Department of Commerce.

	Item	United States tariff		Proposed negotiating country
		Act of 1930	1945 rate	
Par. 719		Cents per pound		
	Fish, pickled or salted. (except fish packed in oil or in oil and other substances and except fish packed in airtight containers weighing, with their contents, not more than 15 pounds each):			
	(2) Cod, haddock, hake, pollock, and cusk, neither skinned nor boned (except that the vertebral column may be removed), and containing not more than 43 percent moisture by weight— 1-1/4	1/ 5/8		CANADA
1/	Trade agreement with Canada, effective January 1939.			
	Note.— The ad valorem equivalent of the duty of 5/8 cent per pound on imports was 12 percent in 1939 and 5 percent in 1943.			

Comment

Dry-salted cod and related species is an important item in the diet of the Puerto Ricans. In 1943 Puerto Rico took substantially the entire United States Government purchases of imported dry-salted fish, which amounted to 16 million pounds. There is also an appreciable consumption in continental United States by Latins, Scandinavians, and orientals.

COD, HADDOCK, HAKE, POLLOCK, AND CUSK, PICKLED OR SALTED,  
CONTAINING NOT MORE THAN 43 PERCENT MOISTURE BY  
WEIGHT (DRY-SALTED)-Continued

The United States is on a substantial import basis largely because it is more profitable to market the very large domestic catch of cod and related species as fresh and frozen fish (principally fillets) rather than as salted products.

COD, HADDOCK, HAKE, POLLOCK, AND CUSK, PICKLED OR  
SALTED, CONTAINING MORE THAN 43 PERCENT MOISTURE  
BY WEIGHT (GREEN-SALTED) CANADA  
UNITED KINGDOM  
(Newfoundland)

Stat. import class (1939): 0069.2

United States production, exports, and imports, 1937-39 and 1943

Year	Production <sup>1</sup>	Domestic exports <sup>2</sup>	Imports for consumption from--				
			All countries <sup>3</sup>	CANADA	NE. FOUND- LAND	Miguelon and St. Pierre	Norway
Quantity (1,000 pounds)							
1937 --	7,783	Not avail- able	46,940	23,150	22,370	229	69
1938 --	6,202		39,825	16,867	22,089	95	26
1939 --	6,154		45,759	23,539	18,751	2,508	425
1943 --	4/ 4,680		5/ 14,812	10,130	4,164	-	-
Value (1,000 dollars)							
1937 --	361	Not avail- able	2,008	893	1,056	12	5
1938 --	235		1,534	661	833	3	2
1939 --	244		1,767	925	712	88	20
1943 --	4/ 188		5/ 1,651	1,218	376	-	-

1/ Does not include products of American fisheries. (See comment).

2/ See table under dry-salted.

3/ Imports into continental United States are used principally in manufacture of boneless and fibered fish and canned cod fish cakes (see comment concerning imports into Puerto Rico).

4/ Production statistics for 1940 the last year for which data are available.

5/ Free for Government use 778 thousand pounds valued at 102 thousand dollars.

Source: Production statistics from the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Par. 719:	Item	United States tariff		Proposed negotiating country
		Act of 1930	1945 rate	
			Cents per pound	
	Fish, pickled or salted (except fish packed in oil or in oil and other substances and except fish packed in airtight containers weighing with their contents not more than 15 pounds each):			
	(2) Cod, haddock, hake, pollock, and cusk, neither skinned nor boned (except that the vertebral column may be removed), and containing more than 43 percent moisture by weight- 3/4		1/3/8	CANADA, UNITED KINGDOM
1/ Trade agreements with Canada and the United Kingdom, effective January 1939.				
Note.- The ad valorem equivalent of the duty of 3/8 cent per pound on imports was 10 percent in 1939 and 3 percent in 1943.				

Comment

As is the case with other salted fish, the domestic production of green-salted cod and related species is limited primarily by the fact that there is a better market for the same fish in the fresh or frozen condition. All imports entered

COD, HADDOCK, HAKE, POLLOCK, AND CUSK, PICKLED OR SALTED,  
 CONTAINING MORE THAN 43 PERCENT MOISTURE  
 BY WEIGHT (GREEN-SALTED)--Continued

through the Puerto Rican customs district, but only a relatively small part of those entering continental United States, are consumed as entered. Imports into Puerto Rico during the years 1935-40 averaged about 20 million pounds annually. The bulk of the entries through the customs districts of the New England States and New York are further processed before marketing into boneless and fibered cod and canned codfish cakes. These imports furnish about 85% of the raw material used by the domestic processing industry, although production of green-salted fish in continental United States has been augmented by increasing supplies produced by domestic operators on the treaty coasts of Newfoundland and Canada and entered duty-free as products of American fisheries (see table below).

Cod, haddock, hake, pollock, and cusk, pickled or salted: Products of American fisheries entered into the United States from the treaty coasts of Newfoundland and Canada free of duty under paragraph 1730(a) of the Tariff Act of 1930

Year	Quantity : 1,000 pounds	Value : 1,000 dollars
1937	1,473	44
1938	2,413	72
1939	2,460	73
1943	5,412	434
1944 <u>1/</u>	3,637	307
1945 <u>1/</u>	2,821	250
	:	:

1/ Preliminary

Source: Official statistics of the U. S. Department of Commerce.

COD, HADDOCK, HAKE, POLLOCK, AND CUSK, PICKLED OR SALTED,  
SKINNED OR BONED, WHETHER OR NOT DRIED (BONELESS)

CANADA

Stat. import class (1939): 0069.9

United States production, exports, and imports, 1937-39 and 1943

Year	Production 1/	Domestic exports	Imports for consumption from--			
			All countries	CANADA	Japan	
Quantity (1,000 pounds)						
1937	11,314	Not	2,090	2,069	-	
1938	9,822	avail-	2,236	2,186	1	
1939	4,629	able 2/	2,726	2,644	76	
1943	3/ 9,534		4/ 3,606	3,606	-	
Value (1,000 dollars)						
1937	1,910	Not	209	207	-	
1938	1,505	avail-	201	197	5/	
1939	753	able 2/	204	199	5	
1943	3/ 1,469		4/ 694	694	-	

1/ Prepared principally from imported green-salted fish. (See preceding digest)

2/ Known to be small.

3/ Production statistics for 1940, the last year for which data are available.

4/ Free for Government use, 32 thousand pounds valued at 2 thousand dollars.

5/ Less than \$500.

Source: Production statistics from the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of	1945	
	1930	rate	
		Cents per pound	

Par. 719

Fish, pickled or salted (except fish packed in oil or in oil and other substances and except fish packed in airtight containers weighing with their contents not more than 15 pounds each):

(3) Cod, haddock, hake, pollock, and cusk, skinned or boned, whether or not dried ----- 2 1/ 1½

CANADA

1/ Trade agreement with Canada, effective January 1939.

Note.— The ad valorem equivalent of the duty of 1½ cents per pound on imports was 20 percent in 1939 and 8 percent in 1943.

#### Comment

Consumption has been fairly steady at 12-15 million pounds a year over an extended period.

The United States industry producing boneless cod (also fibered cod and canned codfish cakes) supplied approximately four-fifths of the domestic consumption in the 5 years preceding the war. It is largely dependent for raw material, however, upon imports of green-salted fish which come almost entirely from Canada and Newfoundland.

COD, HADDOCK, HAKE, POLLOCK, AND CUSK, PICKLED OR SALTED, SKINNED  
OR BONED, WHETHER OR NOT DRIED (BONELESS)-Continued

The competing imports of the finished product, boneless fish, come almost entirely from Canada. Most of the Canadian production is for this market, the United States taking almost four-fifths of the total Canadian exports.

The present duties are 3/8 cent per pound on the raw material (green-salted) and  $1\frac{1}{2}$  cents per pound on the finished product (boneless). It takes approximately 167 pounds of green-salted fish to produce 100 pounds of boneless. The duty on 167 pounds of imported raw material would amount to about 62 cents; the duty on 100 pounds of the finished product would be \$1.50. Thus the domestic boning industry has a margin of approximately 9/10 cent per pound on the finished product as against the equivalent in terms of raw material. This differential is largely responsible for the fact that about four-fifths of the domestic consumption of boneless cod and related species is supplied by the domestic industry, utilizing imported green-salted fish to a very large extent as raw material.

HERRING, PICKLED OR SALTED  
(See separate digest on alewives, pickled or  
salted, par. 719(5))

NETHERLANDS  
UNITED KINGDOM  
(Newfoundland)  
CANADA

Stat. import classes (1939): 0070.0-0070.9

United States production, exports, and imports, 1937-39 and 1943-44

Year	Production <sup>1/</sup>	Domestic exports	Imports for consumption from--				
			All countries <sup>2/</sup>	NETHERLANDS	UNITED KINGDOM	NEWFOUNDLAND	CANADA
Quantity (1,000 pounds)							
1937	9,596	1,710	35,258	9,540	2,910	3,972	2,194
1938	8,415	n.a.	34,204	6,579	3,810	4,276	1,811
1939	12,697	n.a.	27,398	3,656	2,783	5,828	2,948
1943	3/11,319	1,047	35,112	-	-	8,991	18,038
1944 <sup>4/</sup>	n.a.	974	35,592	-	-	7,060	21,004
Value (1,000 dollars)							
1937	508	67	1,477	396	206	138	72
1938	390	n.a.	1,495	361	225	119	74
1939	625	n.a.	1,273	260	194	174	100
1943	3/ 566	74	2,535	-	-	501	1,065
1944 <sup>4/</sup>	n.a.	84	3,308	-	-	537	1,582

<sup>1/</sup> Does not include relatively small quantities, the product of American fisheries operating on the treaty coasts of Newfoundland and Magdalen Islands.

<sup>2/</sup> Norway, Sweden, and Iceland were the other principal sources during 1937-39, and Iceland in 1943 and 1944.

<sup>3/</sup> Production is estimated by a combination of 1940 and 1941 data, the latest years for which statistics are available.

<sup>4/</sup> Preliminary.

Source: Production statistics from the U. S. Fish and Wildlife Service; exports and imports from official statistics of the U. S. Department of Commerce.

## HERRING, PICKLED OR SALTED-Continued

<u>Item</u>	<u>United States tariff</u>		<u>Proposed negotiating country</u>
	<u>Act of 1930</u>	<u>1945 rate</u>	
Par. 719(4)			
Fish, pickled or salted (except fish packed in oil or in oil and other substances and except fish packed in airtight containers weighing, with their contents, not more than 15 pounds each):			
Herring, whether or not boned:			
In containers (not airtight) weighing, with contents, not more than 15 pounds each:	25% ad val.	25% ad val.	NETHERLANDS
In bulk or in containers weighing, with contents, more than 15 pounds each:			
In containers containing each <u>not</u> more than 10 pounds of herring.	1 $\frac{1}{2}$ lb.	3/4 $\frac{1}{2}$ lb. $\frac{1}{4}$	do.
In containers containing each <u>more</u> than 10 pounds of herring,			
If known commercially as full herring:			
When imported from Dec. 15 to the following Jan. 31, incl.	1 $\frac{1}{2}$ lb. $\frac{2}{1}$	1/2 $\frac{1}{2}$ lb. $\frac{3}{1}$	UNITED KINGDOM
When imported from Feb. 1 to Dec. 14, inc.	1 $\frac{1}{2}$ lb.	1/2 $\frac{1}{2}$ lb. $\frac{3}{1}$	do.
Valued at 6 cents or more per pound.	1 $\frac{1}{2}$ lb. $\frac{2}{1}$	1/2 $\frac{1}{2}$ lb. $\frac{3}{1}$	do.
Beheaded or eviscerated but not further advanced (except that the fins may be removed).	1 $\frac{1}{2}$ lb. $\frac{4}{1}$	1/2 $\frac{1}{2}$ lb. $\frac{3}{1}$	CANADA, UNITED KINGDOM
If known commercially as split herring.	1 $\frac{1}{2}$ lb. $\frac{4}{1}$	1/2 $\frac{1}{2}$ lb. $\frac{3}{1}$	do.
Other	1 $\frac{1}{2}$ lb.	1/2 $\frac{1}{2}$ lb. $\frac{3}{1}$	UNITED KINGDOM

1/ Trade agreement with the Netherlands, effective February 1936.

2/ Reduced to 5/8-cent per pound by trade agreement with the United Kingdom, effective January 1939.

3/ Trade agreement with Iceland, effective November 1943.

4/ Reduced to 5/8-cent per pound by trade agreement with Canada, effective January 1939.

Note.- The specific rates of duty applicable to imports in 1939 and in 1944 and the ad valorem equivalents of these duties were as follows:

	<u>1939</u>		<u>1944</u>	
	<u>Rate of duty (Cents per lb.)</u>	<u>Ad val. equiv. (Percent)</u>	<u>Rate of duty (Cents per lb.)</u>	<u>Ad val. equiv. (Percent)</u>
In containers containing each <u>not</u> more than 10 pounds of herring	3/4	10	3/4	5
In bulk or in containers containing each <u>more</u> than 10 pounds of herring:				
If commercially known as full herring:				
When imported Dec. 15-Jan. 31 ---	5/8	18	1/2	
When imported Feb. 1-Dec. 14 ---	1	29	1/2	) 10
Valued at 6 cents or more per pound ---	5/8	8	1/2	5
Beheaded or eviscerated, etc. ---	5/8	13	1/2	6
If known commercially as split herring ---	5/8	16	1/2	6
Other	1	21	1/2	2

## HERRING, PICKLED OR SALTED--Continued

Comment

Salted and pickled herring constitutes one of the less important forms in which the United States catch of herring is marketed, ranking far behind meal and oil (roughly 60 percent), canned fish (roughly 18 percent), and fresh and frozen fish (possibly 10 percent). As seen below, this class of herring, which is preserved by salt and by salt and vinegar in more forms and by more methods than perhaps any other species of fish, is divided into two groups in the Tariff Act of 1930: (1) in bulk or in containers of over 15 pounds, gross, and (2) in containers of 15 pounds or less. These classifications correspond roughly to the division of herring moving in commerce into two types: (1) salted or pickled, usually in barrels, half barrels, or kegs, and (2) further processed and repacked in small containers such as glass jars, buckets, and pails. The first predominates in the import trade and is important in the internal wholesale trade of the United States. The second is insignificant in import trade but is increasingly important in the domestic market. For the most part, the less advanced products which come from foreign sources are similar to those of domestic origin, as is indicated by the following list of the principal products consumed in the United States.

Domestic: Alaska Scotch-cured, marinated  $\frac{1}{4}$ , Bismarck, Alaska Norwegian  $\frac{2}{4}$ , dry-salted  $\frac{3}{4}$ , pickled  $\frac{2}{4}$ , round (bloat or stock)  $\frac{2}{4}$ , lake herring, and vinegar-cured  $\frac{4}{4}$ .

Imported: Scotch-cured, Holland, Bismarck, Newfoundland Scotch-cured, round  $\frac{2}{4}$ , and split, Iceland round  $\frac{2}{4}$ , Norwegian  $\frac{2}{4}$ , Nova Scotia  $\frac{2}{4}$ , and vinegar-cured  $\frac{4}{4}$ .

The names and grades of the different products are determined by origin, the size and fatness of the fish, the method of cutting and packing, the quantity of salt added, the quantity of blood and viscera remaining in the fish during the salting process, the quantity of milt and roe in the fish, and the quantity and kinds of spices added. Lake herring, which is one of the leading domestic products in terms of volume, is smaller in size, lower in fat content, darker in color, and softer in texture than sea herring. Some types of herring, notably dry-salted, Holland, and Newfoundland split, are heavily salted, whereas most of the other products are not salted enough to effect adequate preservation and must, therefore, be kept in cold storage. In 1939 cold storage holdings of salted herring (both domestic and imported) ranged from 11 million pounds in January to 19 million pounds in June; in 1945 the range was from 8 million pounds in December to 14 million pounds in May.

Four facts about consumption are noteworthy in evaluating competition in the United States. First, the market for pickled and salted herring is largely east of the Mississippi; the lake herring goes mainly to low-income trade in the South-Central States, and the sea herring in considerable part to the Northeastern States. Second, some groups of consumers have a strong preference for certain imported products; such leading kinds as Scotch-cured herring from the United Kingdom, Holland herring from the Netherlands, and Norwegian herring from the Scandinavian countries are preferred to similar products of domestic origin. Third, there has been an upward trend in the consumption of herring put up in small containers, especially pickled herring in glass jars. Fourth, for the past 20 years there has been a trend away from salted fish in general and toward fresh and frozen sea food, which has become more readily available as the facilities for handling these products have improved and expanded.

$\frac{1}{4}$  Commercial production largely from vinegar-cured herring.

$\frac{2}{4}$  Intermediate product, most of which is used in the production of smoked herring.

$\frac{3}{4}$  Consumed largely by orientals.

$\frac{4}{4}$  Used largely in commercial production of marinated herring.

## HARRING, PICKLED OR SALTED--Continued

The output of salted and pickled herring by the American fisheries comes from three widely separated areas: (1) Great Lakes, roughly one-half of the total (1939); (2) Alaska, roughly one-fourth; and (3) New England, roughly one-sixth. As already mentioned, the salted and pickled herring industry utilizes only a small fraction of the total herring catch. About 90 percent of the 185 million pounds landed in Alaska in 1939 was used in the manufacture of meal and oil, and the remainder was equally divided between pickled-and-salted and fresh-and-frozen products. At least 70 percent of the 75 million pounds landed in Maine and Massachusetts consists of small immature herring taken by the sardine canners; and most of the remainder is vinegar-cured for marinating, salted for subsequent smoking, or used fresh and frozen for food and as fish bait. About half of the catch of lake herring - 23 million pounds in 1939 - was marketed fresh or frozen; relatively small quantities were smoked; and most of the remainder was salted. These proportions are fairly representative, although they are influenced by the size of the catch of herring, which has varied by as much as 80 million pounds from one year to the next. <sup>1/</sup>

Domestic production of pickled or salted sea herring is confined almost entirely to Maine and Alaska. The Maine production consists principally of pickled fish, which is smoked before marketing; and of brine-salted herring and vinegar-cured herring, appreciable quantities of which are marinated and repacked in small containers before marketing. The Alaskan production is about 85 percent Scotch-cured, the remainder consisting of Norwegian-cured, dry-salted, and oush herring. The Scotch-cured and the dry-salted are marketed as such, but all of the oush and substantial part of the Norwegian are subsequently smoked. The salted lake herring produced in the Great Lakes States is marketed as such.

The domestic industry is also engaged in repacking increasing quantities of pickled and salted herring, of domestic or foreign origin, in small containers. The primary producers characteristically market the product in barrels, 1/2-barrels, or kegs, after which a substantial part of the herring is repacked in smaller containers. Food distributors and wholesalers located near areas of consumption in the United States do a large part of the repacking. Their proximity to the market gives them an advantage over the foreign producers of similar products; they have established contacts for distributing their products, and are able to fill small orders on short notice, sometimes repacking to suit specifications of individual purchasers. Moreover, transportation costs, as between the domestic and foreign product in small containers, favor the domestic producer. Both domestic and imported sea herring are used for such repacking as well as salted alewives which are usually marketed as pickled or spiced herring (see digest on alewives, pickled or salted).

In the past, domestic production of salted and pickled herring in primary form (large containers) from year to year has been influenced substantially by the volume of the total catch of sea herring; and the catch has varied by as much as 80 million pounds from one year to the next. Moreover, the composition of the catch as to grade and size has also been important, since fish that are too small are not suitable for salting. An important competitive factor as regards herring in primary containers is transportation costs which favor the products from Canada, Newfoundland, Iceland and northern European countries. The Alaska catch of sea herring is sufficiently large to supply all domestic needs for pickled or salted herring; but largely because of the distance from principal consuming centers in Northeastern United States, and resultant high transportation costs,

<sup>1/</sup> In addition to the production shown in the preceding table there is a small quantity of salted sea herring (roughly around 750,000 pounds annually) which, while in part taken from the sea by foreign fishermen, is a product of American fisheries operating on the treaty coasts of Newfoundland and Magdalen Islands. American vessels transport the fish to New England ports to enter it duty-free under paragraph 1730(a). The product is used almost entirely by the herring-smoking industry.

## HERRING, PICKLED OR SALTED--Continued

less than 15 percent of the annual Alaskan catch in the prewar decade was pickled or salted; most of the remainder was used in the manufacture of meal and oil. This differential in transportation costs is one of the important reasons why about 75 percent of the United States consumption of pickled or salted herring in primary containers is supplied by imports.

Imports of pickled or salted herring are almost entirely in large containers. This includes the salted products marketed as originally packed or as repacked in this country, as well as those taken by the domestic smoking industry. Until 1935 the United Kingdom was the principal source of imports, and from 1935 to 1940 the Netherlands was the principal supplier. But, following the outbreak of the war, these and other European countries were forced to curtail production and exports. As a result, the principal sources of United States imports changed from European countries to Canada, Newfoundland, and Iceland. In 1942 the latter supplied 96 percent of total imports<sup>28</sup> against 26 percent in 1937, while European countries furnished less than 1 percent in 1942 compared with 74 percent in 1937.

Herring, pickled or salted: United States imports for consumption, by type of pack and principal sources, 1937 and 1943

Type of Pack	Year	Total Value:	Imports	
				Principal sources
In small containers (not more than 15 pounds gross)	(1937)	\$47	: Sweden, \$47	
	(1943)	269	: CANADA, \$269	
Holland herring (more than 15 pounds gross but not more than 10 lbs. net)	(1937)	380,740	: NETHERLANDS, \$338,106; Norway, \$9,159;	
			: Italy, \$6,976; Sweden, \$6,232;	
			: CANADA, \$5,940; Iceland, \$5,291.	
	(1943)	-		
In bulk or large containers (more than 15 pounds gross and 10 pounds net)	(1937)	1,096,060	: Norway, \$290,870; UNITED KINGDOM, \$202,529; NEWFOUNDLAND, \$137,014;	
			: Iceland, \$111,012; Sweden, \$106,702;	
			: CANADA, \$65,526.	
	(1943)	2,534,685	: CANADA, \$1,065,023; Iceland, \$731,820; NEWFOUNDLAND, \$501,008;	
			: Spain, \$111,159.	

Source: Official Statistics of the U. S. Department of Commerce.

The duty on salted and pickled herring has not been a major factor affecting the import trade, with the possible exception of fish packed in small containers. The recent differential in rate of duty against the fish in small containers has probably had some effect as a deterrent to importation, but considering as a whole the types of herring imported in large containers, more important factors in competition have been the transportation-cost differences, the consumer preferences, and the relative proportion of herring of suitable grade and size in the waters of Alaska and Maine as compared to the principal countries exporting to the United States. Since the Tariff Act of 1930, herring in small containers has been dutiable at 25 percent ad valorem, the rate not having been lowered by any trade agreement, whereas the product in large containers was dutiable at 1 cent per pound until reduced by trade agreements to the present rates of 1/2 or 3/4 cents per pound. The 1-cent rate in most years when it was in effect was not very different in ad valorem equivalent from the rate on fish in small containers. The ad valorem equivalents of the present reduced duties on six statistical classifications of imports (1 at 3/4 cent per pound and 5 at 1/2 cent per pound) in 1944, when prices were high, ranged from 2.1 percent to 10.4 percent, and averaged 5.4 percent; thus the duty on imports in small containers was nearly 5 times the average duty on imports in large containers. Even on the basis of prewar values, it would have been nearly twice the average of the present rates of duty on imports in large containers.

## HERRING, PICKLED OR SALTED--Continued

With adequate supplies of raw material and the demonstrated ability to produce certain types of salted herring which meet the trade and consumer preferences and requirements of this country, Canada, Newfoundland, and Iceland are likely to continue producing salt herring for the American market. In the case of the Scotch-cured, Norwegian, and Holland herring, however, the long-established preferences for Scotch-cured herring from the United Kingdom, for Norwegian herring from Scandinavian countries and for Holland herring from the Netherlands, will likely reassert themselves when products from these sources become available.

## MACKEREL, PICKLED OR SALTED

Par. No. 719(4)  
CANADA

Stat. import classes (1939): 0072.0, 0072.2

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports <sup>1/</sup>	Imports for consumption from--				
			All countries	CANADA	Norway	Eire	Sweden
Quantity (1,000 pounds)							
1937	1,802	Not	6,435	2,285	2,441	788	611
1938	1,789	avail-	5,878	3,290	1,630	356	497
1939	1,208		5,453	3,286	1,512	289	231
1943	<u>2/</u> 2,158	able	4,084	4,076	-	-	-
Value (1,000 dollars)							
1937	191	Not	408	175	140	42	22
1938	158	avail-	304	177	80	19	17
1939	82		258	171	54	13	7
1943	<u>2/</u> 136	able	556	555	-	-	-

<sup>1/</sup> Small, if any.<sup>2/</sup> Production for 1940, the latest year for which data are available.

Source: Production from statistics of the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
Par. 719			
Fish, pickled or salted (except fish packed in oil or in oil and other substances and except fish packed in airtight containers weighing, with contents, not more than 15 pounds each):			
(4) Mackerel, whether or not boned:			
In bulk or in containers weighing with contents more than 15 pounds each -- 1¢ lb. net wt.	1/1¢ lb. net wt.		CANADA
In containers (not airtight) weighing with contents not more than 15 pounds each ----- 25% ad val.	25% ad val.	do.	

<sup>1/</sup> Duty was bound against increase in Canadian trade agreement, effective January 1939.

Note.- The ad valorem equivalent of the duty of 1 cent per pound was 21 percent in 1939, and 7 percent in 1943. Practically no imports have entered at the ad valorem rate.

Comment

"Mackerel, pickled or salted," are known in commerce as salt mackerel and are further distinguished as split salt mackerel (the original salt product) and as salt mackerel fillets (first produced commercially about 1928). Approximately 3 pounds of fresh mackerel are required to produce 2 pounds of split salt mackerel and 4 pounds to produce 2 pounds of salt fillets.

Mackerel are caught off both coasts of the United States, but practically the entire domestic production of salt mackerel is from fish caught off the Atlantic coast. The mackerel-salting industry centers at Gloucester, Mass., and normally takes from 5 to 15 percent of the total catch.

## MACKEREL, PICKLED OR SALTED--Continued

Following the trend in practically all salt fish products, the domestic consumption of salt mackerel has decreased as improved and expanded transportation and marketing facilities have increased the markets for fresh and frozen fish. Formerly dependent upon the salt fish market, the Atlantic mackerel fleet now fishes for the fresh and frozen market, the salting industry furnishing a backlog for the utilization of surplus landings during the peak of the fishing season, which normally extends from April to November. Although the trend in production of salt mackerel, since the turn of the century has been distinctly downward, there have also been violent year-to-year fluctuations resulting from variations in the catch.

In Canada, where there is always a domestic surplus of mackerel, salting is a primary industry which takes from one-half to two-thirds of the annual catch. Most of the Canadian production is exported, the lower grades to British possessions in Central America and the better grades to the United States and other countries.

Substantially the same conditions prevail in European production as are found in Canada. There are somewhat restricted markets for the fresh fish and the salting industries therefore take the bulk of the catch of mackerel. Most of the European producing areas are largely dependent upon export markets and the bulk of their exports to the United States consist of the better grades.

Data on domestic production of salt mackerel since 1940 are not available, but informed sources indicate that, at least since 1941, there has been little or no salt mackerel produced in the United States, largely owing to high prices and sustained demand for the fresh and frozen fish. Production may be resumed in the postwar years if and when surplus catches of fresh mackerel are landed. But imports will probably supply from 60 to 85 percent of domestic consumption, largely because the volume of domestic production is uncertain, whereas adequate supplies from foreign sources will be available.

ALEWIVES, PICKLED OR SALTED, IN BULK OR IN CONTAINERS WEIGHING,  
WITH CONTENTS, MORE THAN 15 POUNDS EACH

(See digest on herring, pickled or salted, statistical classes 0070.0-0070.9)

Stat. import class (1939): 0073.3

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports <sup>1/</sup>	Imports for consumption from—			
			All countries	CANADA		
Quantity (pounds)						
1937 ——	13,259,000	Not available	2/ 26,250	4,000		
1938 ——	15,720,000		19,016	19,016		
1939 ——	16,464,000		14,835	14,435		
1943 ——	3/ 15,824,000		810,641	809,241		
Value (dollars)						
1937 ——	383,554	Not available	2/ 852	99		
1938 ——	729,548		850	850		
1939 ——	632,790		497	486		
1943 ——	3/ 723,106		32,082	31,994		

<sup>1/</sup> May have exceeded imports in prewar years.

<sup>2/</sup> Includes 20,000 pounds valued at \$660 imported from Norway.

<sup>3/</sup> Production statistics are for 1940, the latest year for which data are available.

Source: Production statistics from the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
Par. 719			
Fish, pickled or salted (except fish packed in oil or in oil and other substances and except fish packed in airtight containers weighing with their contents not more than 15 pounds each):		Cents per pound, net weight	
(5) Alewives:			
In bulk or in containers weighing, with contents, more than 15 pounds each —————	1 $\frac{1}{4}$	1/ 5/8	CANADA
1/ Trade agreement with Canada, effective January 1939; rate previously reduced to 3/4 cents per pound in first trade agreement with Canada, effective January 1936.			

Note.— The duty on total imports in 1939 was equivalent to 14 percent ad valorem.

Comment

Alewives are caught in varying quantities along the entire Atlantic coast of the United States, but between 80 and 90 percent of the total catch is landed in Maryland, Virginia, and North Carolina, and these States account for the bulk of the domestic pack of pickled or salted alewives. The total United States catch averages about 35 million pounds annually of which about two-thirds is pickled or salted, one-fifth marketed fresh or frozen, and the remainder smoked or canned.

ALEWIVES, PICKLED OR SALTED, IN BULK OR IN CONTAINERS WEIGHING,  
WITH CONTENTS, MORE THAN 15 POUNDS EACH-Continued

The preserving of alewives by salting falls into 6 general classifications, three of which account for about 84 percent of the total; these are corned (38%), pickled (28%), and spiced (18%). Pickled alewives are an intermediate product used in making a pickled and spiced product packed in glass jars in middle western centers and generally marketed as spiced or pickled herring (see digest on pickled or salted herring). Practically all of the remaining classes of products mentioned are marketed as packed. Most of them are relatively low-priced products sold throughout the southern and south-central States. Before the war small quantities were exported to West Indian markets.

The Canadian catch of alewives ranges from 6 to 13 million pounds annually, averaging about 8 million pounds. Quantities salted vary with the catch and are also influenced by relative market demands for the fresh and the salted fish. In 1939 the catch was 12 million pounds, of which three-fourths was marketed fresh and most of the remainder salted. The bulk of the salted production is exported to the British West Indies and Haiti; the United States takes less than 1 percent, more than half of this quantity entering the Virgin Islands.

It is believed that United States exports of salted alewives and shipments to Puerto Rico and the Virgin Islands normally exceed imports.

FISH, PICKLED OR SALTED, N.S.P.F.: OTHER THAN ALEWIVES, COD  
AND RELATED SPECIES, MACKEREL, HERRING, AND SALMON

Stat. import classes (1939): 0073.5 and 0073.9

United States production, exports, and imports, 1937-39 and 1943

Year	Production 1/	Domestic exports	Imports for consumption from--				
			All countries	SOVIET UNION	CHINA	Japan	Phil. Is. 2/
Quantity (1,000 pounds)							
1937	4,856	3/ 1,001	4/ 1,237	132	53	296	372
1938	4,898	n.a.	1,050	118	145	184	438
1939	6,443	5/ 1,756	1,096	134	187	177	407
1943	6/ 4,619	3/ 550	7/ 489	-	-	-	-
Value (1,000 dollars)							
1937	317	3/ 51	4/ 96	16	8	20	9
1938	324	n.a.	84	17	18	16	10
1939	468	5/ 75	100	26	21	20	10
1943	6/ 353	3/ 40	7/ 48	-	-	-	-

1/ Production statistics include an undetermined amount of pickled or salted fishery products which may properly belong in other classifications because the initial publication in detail could have revealed the operations of individual companies.

2/ Duty-free.

3/ Includes pickled or salted alewives.

4/ Includes 255 thousand pounds valued at 28 thousand dollars imported from Hong Kong.

5/ Includes pickled or salted herring, and pickled or salted alewives.

6/ Production data are a combination of 1940 and 1941 statistics.

7/ The principal sources of imports in 1943 were: Greenland, 120 thousand pounds, valued at 5 thousand dollars; Canada, 116 thousand pounds, valued at 10 thousand dollars; Peru, 102 thousand pounds, valued at 9 thousand dollars; and Mexico, 65 thousand pounds, valued at 9 thousand dollars.

Source: Production statistics from the U. S. Fish and Wildlife Service; exports and imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
Par. 719			
Fish, pickled or salted (except fish packed in oil or in oil and other substances and except fish packed in airtight containers weighing with their contents not more than 15 pounds each):			
(5) Other fish (unspecified), n.s.p.f.: In bulk or in containers weighing, with contents, more than 15 pounds each.	1 1/4 lb. net wt.	1 1/4 lb. net wt.	CHINA, SOVIET UNION
In containers (not airtight) weighing, with contents, not more than 15 pounds each.	25% ad val.	25% ad val.	CHINA
Note.- In 1939 the duty of 1 1/4 cents per pound was equivalent to 10 percent ad valorem; in 1943 it was equivalent to 12 percent.			

FISH, PICKLED OR SALTED, N.S.P.F.: OTHER THAN ALEWIVES, COD AND RELATED SPECIES, MACKEREL, HERRING, AND SALMON-Continued

This tariff classification covers all pickled or salted fish except salmon, sea and lake herring, mackerel, cod and related species (cod, haddock, hake, pollock, and cusk), and alewives. Separate digests have been prepared for these products.

Domestic production has shown marked fluctuations over a period of years, ranging from 3 to 6½ million pounds annually. Several species of fish are utilized but from 60 to 80 percent of the total production consists of salted mullet, sablefish, and spot, named in the order of their importance. Most of the salted mullet and spot are consumed in the Southeastern States where they are produced. There is a limited export trade to West Indian countries and small shipments to Puerto Rico and the Virgin Islands. Most of the salted sablefish is consumed in the Western States, with small shipments to the Hawaiian Islands.

Since 1931 total imports have not exceeded 1½ million pounds annually. Before the war imports came principally from the Soviet Union, China, Japan, and the Philippine Islands; and a sample analysis, made in 1936, indicated that the bulk of them consisted of specialty products consumed by orientals. This is further evidenced by the fact that 62 percent of the quantity and 41 percent of the value of total imports in that year entered through the Hawaiian customs district, while 24 percent of the quantity and 43 percent of the value entered through New York and San Francisco. During the war years imports declined and sources changed. In 1943 they came principally from Greenland, Canada, Mexico, Peru, and Portugal. Information is not available on the types of products which make up the 1943 imports; it is believed, however, that they were unlike the products formerly imported from oriental countries, or the products which make up most of the domestic production.

Fish, pickled or salted, n.s.p.f.: United States imports for consumption, by type of container and principal sources, 1939 and 1943

Type of container	Year	Value	Principal sources
In small containers (not more than 15 pounds gross).	1939	\$6,056	Japan, \$5,768; CHINA, \$288
	1943	346	Mexico, \$344
In bulk or large containers (more than 15 pounds gross).	1939	94,339	SOVIET UNION, \$25,503; CHINA, \$21,068; Japan, \$14,186;
			Philippine Islands, \$9,529
	1943	47,827	Canada, \$10,391; Peru, \$9,373; Mexico, \$8,166; Portugal, \$6,279; Greenland, \$4,783

Source: Official statistics of the U. S. Department of Commerce.

## SALMON, SMOKED OR KIPPERED

(See separate digest on salmon, pickled or salted, par. 719(1))

Stat. import class (1939): 0075.0

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports <sup>1/</sup>	Imports for consumption from--			
			All countries	CANADA	United Kingdom	Sweden
Quantity (pounds)						
1937 --	12,172,744	Not available	3,896	2,241	1,165	375
1938 --	11,778,395		3,739	2,363	822	209
1939 --	12,554,061		3,899	2,909	651	339
1943 --	2/10,966,590	available	3,657	3,647	-	-
Value (dollars)						
1937 --	3,515,295	Not available	2,252	704	1,316	147
1938 --	3,161,276		2,128	854	1,083	116
1939 --	3,732,250		1,899	897	749	253
1943 --	2/3,563,180	available	1,376	1,373	-	-

<sup>1/</sup> Believed to be considerably less than imports.<sup>2/</sup> Production for 1940, the latest year for which statistics are available.

Source: Production from statistics of the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
	Percent ad valorem		

Par. 720(a)

Fish, smoked or kippered (except fish packed in oil or in oil and other substances and except fish packed in airtight containers weighing, with contents, not more than 15 pounds each):

(1) Salmon----- 25 <sup>1/15</sup>

CANADA

<sup>1/</sup> Trade agreement with Canada, effective January 1939.Comment

Smoked salmon, because of its perishability and the relatively staple nature of its raw material (mild-cured salmon), is prepared for immediate consumption chiefly in the large consuming centers. It is a high-priced product prepared almost entirely from top grade red-meat chinook salmon. The United States is an extensive market for smoked salmon, but imports, even when duty-free (before the Tariff Act of 1922), have never exceeded 3 percent of domestic consumption. Factors favoring production in the large consuming areas for immediate consumption apparently preclude extensive imports, although improvements in transportation facilities and in preserving processes, such as expanding cold storage units, might lead to a noticeable increase in foreign competition.

## SALMON, SMOKED OR KIPPERED--Continued

Kippered salmon is a form of smoked fish prepared largely from fresh and frozen white-meat chinook salmon. The competitive problems with respect to this product are substantially the same as those applicable to smoked salmon.

A third product covered by this classification consists of hard smoked or "Indian-cured" salmon. It is, however, relatively insignificant in domestic production and imports.

HERRING, SMOKED OR KIPPERED <sup>a/</sup>

Stat. import classes (1939): 0075.1-0075.4

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports	Imports for consumption from--				
			All countries	CANADA	NORWAY	UNITED KINGDOM	Iceland
Quantity (1,000 pounds)							
1937	5,298		3,015	1,002	902	873	-
1938	5,027		2,944	621	1,315	779	36
1939	<sup>1/</sup> 4,737	Negligible	2,643	1,175	1,016	336	57
1943	<sup>1/</sup> 4,787		4,307	4,307	-	-	-
Value (1,000 dollars)							
1937	478		156	39	30	73	-
1938	613		151	29	42	67	3
1939	<sup>1/</sup> 573	Negligible	166	100	30	28	4
1943	<sup>1/</sup> 547		570	570	-	-	-

<sup>1/</sup> Production for 1940, the latest year for which statistics are available.

Source: Production from statistics of the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

<u>Item</u>	<u>United States tariff</u>	<u>Proposed negotiating country</u>
	<u>Act of 1945</u>	
	<u>1930 rate</u>	
	<u>Cents per pound</u>	

## Par. 720(a)

Fish, smoked or kippered (except fish packed in oil or in oil and other substances and except fish packed in airtight containers weighing, with contents, not more than 15 pounds each):

## Herring:

## (2) Whole or beheaded:

Hard-dry-smoked only -----	$1\frac{1}{4}$	<sup>1/</sup> 5/8	CANADA, NORWAY
Other, smoked or kippered -----	$1\frac{1}{4}$	$1\frac{1}{4}$	CANADA, NORWAY
(3) Boned, whether or not skinned, smoked only -----	3	<sup>1/</sup> $1\frac{1}{2}$	CANADA
(3) Eviscerated, split, skinned, or divided, smoked or kippered (not boned) -----	3	$2\frac{1}{2}$	CANADA, UNITED KINGDOM

<sup>1/</sup> Trade agreements with Canada, effective January 1936 and January 1939.<sup>2/</sup> Trade agreement with the United Kingdom, effective January 1939.

Note.- The 1945 rates of duty shown above were applicable to imports in 1939 and 1943. The ad valorem equivalent of these duties on imports was as follows:

<u>Item</u>	<u>1939</u>	<u>1943</u>
	<u>(Percent)</u>	
Whole or beheaded:		
Hard dry-smoked -----	20	6
Other -----	18	13
Boned, whether or not skinned -----	15	9
Eviscerated, split, skinned, etc. (not boned) -----	22	14

<sup>a/</sup> Consists of sea herring, lake herring, and ciscoes.

## HERRING, SMOKED OR KIPPERED-Continued

Comment

The commodities covered by the tariff classifications, in the order listed above, consist almost entirely of the following:

(1) Hard dry-smoked sea herring (hard bloaters), also used in the production of boneless herring (see 3 below). Hard bloaters marketed as such are not smoked as heavily as those used in the production of boneless herring. The fish are smoked whole and the product is nonperishable in that it may be kept in ordinary storage over an extended period.

(2) Hard-smoked soft-cured sea herring (soft bloaters). These are also smoked whole, but the product is perishable and unless intended for immediate consumption, must be kept in cold storage. Small quantities are marketed frozen.

(3) Boneless sea herring, manufactured from hard bloaters (see 1 above). These products are nonperishable in that they may be kept in ordinary storage over an extended period.

(4) Kippered sea herring (kippers) and smoked lake herring and ciscoes (the cisco is the herring of Lake Erie). Kippers are perishable and unless intended for immediate consumption, must be kept in cold storage. A substantial part of the prewar imports were frozen, but most of the domestic production was not. The standard product is split down the back and eviscerated before smoking; there are, however, some production and some imports of kippers which have been beheaded, split down the belly, and eviscerated. Lake herring and ciscoes are smoked with heads on but are eviscerated by cutting from the head to the vent. Both products are perishable and unless intended for immediate consumption, must be kept in cold storage.

Domestic production of smoked and kippered sea herring is confined almost entirely to Maine and Massachusetts. In inland centers of consumption there is some production of kippers prepared from domestic and imported frozen sea herring, but the quantity is not known.

As the supplies of suitable sea herring off the Atlantic coast of the United States are, in most years, insufficient for the demands of the processing industries of the New England States (principally canned sardines and smoked and kippered herring), the shortages are made up by imports of fresh and frozen sea herring, almost entirely from Canada. The quantities imported depend upon the relative abundance or scarcity of herring in domestic and Canadian waters, and the demands for and prices of the products prepared from them in the United States. During the 10 years ending 1940 the Atlantic coast catch of sea herring ranged from 22 million pounds (1938) to 76 million pounds (1939), while imports of fresh and frozen herring ranged from 19 million pounds (1932) to 50 million pounds (1936). The imports amounted to 75 million pounds in 1943.

Imported fresh and frozen sea herring are duty-free, whereas the smoked and kippered products are dutiable at from 5/8 cent per pound to 2 cents per pound. The duty-free status of the raw material (fresh and frozen sea herring) and the duties on the smoked and kippered products are factors influencing domestic production of smoked and kippered sea herring. The domestic industry supplies about 60 percent of domestic consumption, with imports, principally from Canada, the United Kingdom, and Norway, supplying 40 percent.

## HERRING, SMOKED OR KIPPERED-Continued

The domestic production of smoked lake herring and ciscoes is confined almost entirely to the States bordering the Great Lakes. The United States catch of lake herring and ciscoes averaged slightly more than 20 million pounds annually during the 3 years before the war; the Canadian catch averaged slightly more than 5 million pounds during the same period. More than half of the domestic catch is marketed fresh or frozen and most of the remainder is salted, the smoking industry taking about 5 percent of the catch. According to official statistics the entire Canadian catch is marketed fresh and from one-fourth to one-half of it is exported to the United States. Probably some of these exports are taken by the domestic smokers.

Imports of fresh or frozen lake herring and ciscoes are dutiable at 3/4 cent per pound and the smoked products at 2 cents per pound. There are probably no imports of smoked lake herring and ciscoes. In view of the duty differential, it is probably more profitable for Canadian fishermen and dealers to market exports to the United States as fresh and frozen rather than smoked.

Herring, smoked or kippered: United States imports for consumption,  
by kind, and principal sources, 1939

Kind	:	Total	:	Principal sources
	:	value	:	
Whole or beheaded:	:	:	:	
Hard dry-smoked only (chiefly hard bloaters)	-----:	\$39,020	:	NORWAY, \$26,273; CANADA, \$11,806
Other, smoked or kippered (chiefly soft bloaters)	-----:	14,599	:	Iceland, \$3,802; NORWAY, \$3,168;
			:	United Kingdom, \$3,043
Boned, whether or not skinned, smoked only (chiefly boneless)	---:	52,977	:	CANADA, \$52,546
Eviscerated, split, skinned, or divided, smoked or kippered (chiefly kippers)	-----:	59,863	:	CANADA, \$34,673; UNITED KINGDOM, \$24,936

Source: Official statistics of the U. S. Department of Commerce.



COD, HADDOCK, HAKE, POLLOCK, AND CUSK, SMOKED OR KIPPERED

Stat. import classes (1939): 0075.5,0075.6

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports	Imports for consumption from--			
			All countries	CANADA	United Kingdom	Iceland
Quantity (1,000 pounds)						
1937 --	2,158		2,805	2,619	120	61
1938 --	2,154		2,495	2,461	32	-
1939 --	2,348	Negligible	2,617	2,594	21	-
1943 --	1/ 1,858		1,491	1,491	-	-
Value (1,000 dollars)						
1937 --	275		283	266	11	5
1938 --	218		243	240	3	-
1939 --	244	Negligible	261	259	2	-
1943 --	1/ 219		281	281	-	-

1/ Production for 1940, the latest year for which statistics are available.

Source: Production from statistics of the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate Cents per pound	

Par. 720(a)

Fish smoked or kippered (except fish packed in oil or in oil and other substances and except fish packed in airtight containers weighing, with contents, not more than 15 pounds each):

Cod, haddock, hake, pollock, and cusk:

(4) Whole or beheaded or eviscerated, or both -- 2 $\frac{1}{2}$

1/ 1 $\frac{1}{4}$  CANADA

(5) Filleted, skinned, boned, sliced, or divided - 3

1/ 2 do.

1/ Trade agreement with Canada, effective January 1939.

Note.- The ad valorem equivalent of the duty of 1-1/4 cents per pound on fish, whole or beheaded, etc., was 14 percent in 1939 and 8 percent in 1943. The ad valorem equivalent of the duty of 2 cents per pound on imports of fish, filleted, etc., was 19 percent in 1939 and 10 percent in 1943.

Comment

Domestic production and imports covered by these two tariff classes consist principally of finnan haddie (smoked haddock) and smoked fillets (chiefly cod), the former now dutiable at 1-1/4 cents per pound and the latter at 2 cents per pound. Fillets account for about two-thirds of the domestic production and about four-fifths of the imports. Finnan haddie is prepared from haddock only, but fillets are prepared from cod, haddock, hake, and cusk, with cod and cusk accounting for the great bulk of production and imports. Both products are perishable.

## COD, HADDOCK, HAKE, POLLOCK, AND CUSK, SMOKED OR KIPPERED-Continued

and, unless sold for immediate consumption, are kept in cold storage or frozen. Little, if any, finnan haddie has been frozen, but increasing quantities of smoked cod fillets have been preserved in this manner.

Massachusetts supplies about three-fourths of the total domestic production, with Maine and New York furnishing most of the remainder. Production registered a pronounced decline from about 7-1/2 million pounds in 1930 to slightly more than 2 million pounds annually during the 3 years before the war; it was less than 2 million pounds in 1940, the last year for which data are available, and informed sources indicate that in subsequent years probably did not exceed 1 million pounds annually. Higher domestic prices for fresh and frozen fillets, which diverted the fresh fish to these trade outlets, together with a shortage of skilled labor in the smoking industry, were primarily responsible for the decreasing production during the war years.

Annual imports averaged 1.7 million pounds in the early 1930's but increased to 2.6 million pounds in the 3 years 1937-39; they reached 3.5 million pounds in 1941 and amounted to 3.1 million pounds in 1944. Proximity to United States markets and the perishable nature of the products have been primarily responsible for Canada being the chief source of imports. However, improved freezing, transportation, and marketing facilities may lead to increased imports from other countries, particularly Newfoundland, Iceland, and the United Kingdom. Newfoundland and Iceland fishermen land immense catches of cod. Nearly all of the catch was formerly salted for export, but in recent years increasing quantities have been diverted to frozen fillets and dressed fish for export. This diversion may extend to smoked cod fillets if foreign markets are developed, since export markets for smoked fillets, like those for frozen fillets, furnish a more profitable outlet than the markets taking the salted products. The United Kingdom, before the war, was one of the leading producers of finnan haddie, principally for domestic consumption and export to European markets. Improved facilities may lead to increased exports to the United States. Even if these changes should occur, however, Canada would still probably be the predominant source of United States imports of smoked and kippered groundfish.

As between The United States and Canada, the fishermen of both countries land very large catches of cod, haddock, hake, and cusk (the group being commonly called "groundfish"). Most of the domestic catch is marketed fresh or frozen in the United States, whereas the bulk of the Canadian catch is salted for export, although large and increasing quantities go to the United States as frozen fillets. As fish marketed fresh or frozen generally bring a larger return than salted fish (both in terms of whole fresh fish), the prices paid fishermen in the United States for their catches is consistently higher than that paid Canadian fishermen. This raw material cost differential may have been an important factor in the ratio of imports to United States consumption of smoked groundfish; during the 3 years ending 1939 imports supplied about 47 percent of the consumption of finnan haddie and 58 percent of the consumption of smoked fillets, despite import duties of 2-1/2 cents per pound and 3 cents per pound, respectively, during the first 2 years of that period.

Cod, haddock, hake, pollock, and cusk, smoked or kippered: United States imports for consumption, by kind, and principal source, 1939

Kind	: Total :		Principal source
	: value :	:	
Whole or beheaded or eviscerated, or both (chiefly finnan haddie)	: \$49,479	:	CANADA, \$48,123
Filleted, skinned, boned, sliced, or divided (chiefly fillets)	211,465	:	CANADA, \$210,669

Source: Official statistics of the U. S. Department of Commerce.

FISH, SMOKED OR KIPPERED, NOT SPECIALLY PROVIDED FOR  
(Does not include salmon, herring, cod, haddock, hake, pollack, and cusk)

Stat. import class (1939): 0075.9

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports	Imports for consumption from--			
			All countries	CANADA	Greece	Sweden
Quantity (pounds)						
1937 ---	17,017,000	Neg-	-	-	-	-
1938 ---	14,081,000	ligi-	3,268	3,118	-	-
1939 ---	13,784,000	ble	5,650	2,967	1,244	684
1943 ---	1/ 12,823,000		26,010	26,010	-	-
Value (dollars)						
1937 ---	4,996,000	Neg-	-	-	-	-
1938 ---	4,086,000	ligi-	671	621	-	-
1939 ---	4,365,000	ble	1,188	750	193	84
1943 ---	1/ 3,951,000		5,064	5,064	-	-

1/ Production for 1940, the latest year for which statistics are available.

Source: Production from statistics of the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
	Percent ad valorem		
Par. 720(a)			

Fish, smoked or kippered (except fish packed in oil or in oil and other substances and except fish packed in airtight containers weighing, with contents, not more than 15 pounds each):

(6) Other fish ----- 25 1/12 $\frac{1}{2}$

CANADA

1/ Trade agreement with Iceland, effective November 1943.

#### Comment

Since 1930 the annual domestic production of smoked or kippered fish covered by this tariff classification has ranged from 13 million pounds (1940) to 17 million pounds (1937). A large number of commercial species of fish are smoked or kippered in varying quantities, but between 75 and 90 percent of domestic production is prepared from only 8 species (buffalofish, butterfish, chub, tullibees, lake trout, sablefish, whitefish, and sturgeon). About two-thirds of the total production is in the Middle Atlantic States and about one-fourth in the North Central States bordering the Great Lakes and the Mississippi River. The principal producing States are New York, Pennsylvania, and Wisconsin, with New York accounting for nearly one-half of the total. About three-fourths of the New York State production is from fish caught in the lakes of the United States and Canada, and from frozen sturgeon imported from the Soviet Union and Canada.

## FISH, SMOKED OR KIPPERED, NOT SPECIALLY PROVIDED FOR--Continued

Imports of smoked or kippered fish covered by this tariff classification were only 137,000 pounds in 1931 and registered a marked decrease after that year until 1945 when 245,000 pounds were imported, almost entirely from Canada. The United Kingdom, Canada, Norway, and Germany were the principal sources of imports, with Canada the principal supplier since 1935.

Before the war imports consisted principally of hard-smoked nonperishable products, including specialties consumed principally by people of Scandinavian or of oriental descent. These specialty products are unimportant in the domestic industry. Other smoked or kippered fish consumed in the United States consists principally of perishable freshly-smoked products, and consumer needs are better supplied by a domestic smoking industry located in extensive areas of consumption.

## FISH, PREPARED OR PRESERVED, NOT SPECIALLY PROVIDED FOR

Stat. import classes (1939): 0078.1, 0078.3, 0078.4

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports	Imports for consumption from—			
			All countries	Japan	CANADA	Hong Kong
Quantity (pounds)						
1937	Not available	Not available	124,913	32,170	58,430	9,339
1938			239,674	128,117	86,753	7,973
1939			156,583	72,207	66,689	10,979
1943			1,418,016	—	1,087,757	—
Value (dollars)						
1937	Not available	Not available	10,800	2,959	4,400	1,597
1938			27,309	16,956	6,340	1,393
1939			20,663	11,369	6,349	1,972
1943			222,524	—	220,789	—

1/ Probably smaller than imports.

Source: Official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
Par. 720(b)			
Fish, prepared or preserved, n.s.p.f.:			
In containers weighing, with contents, not more than 15 pounds each:			
Cod, haddock, hake, pollock, and cusk	25% ad val.	2½ lb. but not less than 12½ nor more than 25% ad val. 1/	CANADA
Other	25% ad val.	25% ad val.	do.
In bulk or in containers weighing, with contents, more than 15 pounds each	1½ lb.	1½ lb.	do.
1/ Trade agreement with Canada, effective January 1939.			

Comment

Imports under this paragraph dutiable at 2½ cents per pound but not less than 12½ percent nor more than 25 percent ad valorem are believed to consist of frozen fish cakes (or patties) with tomato sauce (generally designated as "fish cutlets with sauce"). Practically all imports under this classification have come from Canada as shown in the table below which gives imports by kinds, by principal sources in recent representative years. Available information indicates that there is no domestic production of frozen cutlets with tomato sauce, but there is a small production of frozen cutlets without tomato sauce.

## FISH, PREPARED OR PRESERVED, NOT SPECIALLY PROVIDED FOR--Continued

Imports of prepared or preserved fish (other than cod, haddock, hake, pollock, and cusk) in containers weighing with their contents not more than 15 pounds each and dutiable at 25 percent ad valorem have been principally from Asiatic countries and are believed to have consisted almost entirely of specialty products consumed by orientals in the United States. There is probably no domestic production of similar or competitive products.

Imports of prepared or preserved fish in bulk or in containers weighing with their contents more than 15 pounds each and dutiable at 1-1/4 cents per pound have come almost entirely from Asiatic countries and from Canada. Imports from Asiatic countries are largely specialty fish products consumed by orientals in the United States, and probably not competitive with any products produced domestically. Imports under this classification from Canada, according to a sample analysis of entries covering imports, consist principally of scaled fresh lake fish. The United States catch of lake fish ranges from 75 to 85 million pounds annually, most of which is marketed fresh or frozen, either whole or dressed in various ways. Although statistics are not available, it is believed that the domestic production of fish which have been scaled by fishermen or primary dealers and, therefore, similar to the imports from Canada, is a negligible part of the total domestic production of lake fish.

Fish, prepared or preserved, n.s.p.f.: United States imports for consumption, by classes and principal sources, 1939 and 1944 1/

Class	Year	Total value	Principal sources
In immediate containers weighing with their contents not more than 15 pounds each:			
Cod, haddock, hake, pollock, and cusk	1939	\$159	CANADA, \$98; United Kingdom, \$61
	1944	39,329	CANADA, \$27,127; Newf., \$12,202
Other	1939	2,204	Japan, \$2,022; China, \$107
	1944	420	Mexico, \$237; CANADA, \$183
In bulk or in immediate containers weighing with their contents more than 15 pounds each	1939	18,300	Japan, \$9,347; CANADA, \$6,251
	1944	172,228	CANADA, \$171,048; Peru, \$1,180

1/ Preliminary.

Source: Official statistics of the U. S. Department of Commerce.

CRAB MEAT, CANNED  
(In airtight containers)  
(See digest covering "Crab meat, not canned")

Stat. import class (1939): 0080.0

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports	Imports for consumption from—		
			All countries <sup>1/</sup>	Japan	SOVIET UNION
Quantity (1,000 pounds)					
1937 ——	657	Not available	11,157	8,103	2,850
1938 ——	658		7,814	5,974	1,817
1939 ——	640		13,507	10,719	2,750
1943 ——	1,469		2/	—	2/
Value (1,000 dollars)					
1937 ——	270	Not available	3,676	2,909	698
1938 ——	260		2,741	2,213	522
1939 ——	260		4,582	3,767	803
1943 ——	1,194		2/	—	2/

<sup>1/</sup> Imports in 1937-39 may include negligible quantities of crab meat; not canned, and crab paste and crab sauce.

<sup>2/</sup> Less than 500.

Source: Production from official statistics of the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of	1945	
	1930	rate	
Percent ad valorem			
Par. 721(a) Crab meat, prepared or preserved in any manner, including crab paste and crab sauce, packed in air-tight containers	15	1/ 22 $\frac{1}{2}$	SOVIET UNION
<sup>1/</sup> Presidential proclamation, effective September 1941, under section 336 of the Tariff Act of 1930.			

Comment

Canned crab meat consumed in the United States is prepared from several species of crabs. Domestic production is principally from the blue crab of the Atlantic and Gulf coasts and the dungeness crab of the Pacific coast. Prewar imports consisted principally of canned meat from the king crab. In general, the canned meat produced from the different species of crabs is distinguishable in color, texture, and taste, at least when first removed from the container. However, all types are used in salads, cocktails, soups, and other dishes, and when prepared for consumption in these ways, these distinctions often practically disappear.

Hard crabs are caught in the United States in nearly every coastal State and in Alaska. The bulk of the commercial catch, however, is used in the production of fresh-cooked perishable crab meat (8 to 10 million pounds annually), rather than in the further processed canned product (in air-tight cans) which is nonperishable. There are no imports of fresh crab meat. Canning is confined largely to South Carolina, Louisiana, Oregon, Washington, and Alaska. Pacific coast production consists largely of dungeness crab meat, but small though increasing quantities of

## CRAB MEAT, CANNED -Continued

king crab meat are being packed in Alaska. The total domestic pack increased from about 1/4 million pounds in 1932 to 1 million pounds in 1941, owing largely to improved canning processes developed and generally adopted in the South Atlantic and Gulf coast States in the latter 1930's. Despite increased production, however, imports in 1940 and 1941 supplied 90 percent of consumption. With the virtual elimination of imports in 1942 production jumped to 2-1/4 million pounds in that year but dropped to about 1-1/2 million pounds in 1943 and in 1944, despite the practical absence of imports from the domestic market during those years. The loss of crab fishermen and cannery workers to the armed forces and war industries were largely responsible for the decrease in production.

United States imports of canned crab meat before the war came almost entirely from Japan and the Soviet Union, Japan supplying approximately 80 percent of the total. The great bulk of the imports consisted of canned meat produced from king crabs. The Japanese and Soviet Union crab fisheries were confined largely to a common area off the coast of Kamchatka and in the Bering Sea off the coast of Siberia. The Japanese also operated crab fisheries off the coasts of Karafuto, and of Hokkaido (the northern island of Japan proper). The Soviet Union has repossessed Karafuto and the Kurile Islands and will probably, in the peace terms, exclude the Japanese from participation in the fisheries adjacent to Soviet territory, most of which were formerly operated by Japan under concession from the Soviet Union. The annual production of canned crab meat by Japan may thus be reduced to not more than one-third of its former volume. The Soviet Union, however, will probably incorporate in their own industry the fishing and canning operations formerly carried on by Japan in and around Soviet territory. It is therefore reasonable to assume that canned crab meat from the Soviet Union will eventually replace to a large extent imports formerly from Japan.

The volume of imports in the postwar years likely will be influenced more directly by production in the Soviet Union and by the extent to which the United States market for domestic fresh and frozen crab meat is expanded, than by increased domestic production of canned crab meat. A larger proportion of the domestic catch of crabs than in 1942 will probably be utilized in the production of fresh and frozen crab meat, as a consequence of which the annual production of canned crab meat is unlikely to exceed the peak pack of 2-1/4 million pounds reached in that year.

Based on the difference in costs of production in the United States and Japan, the duty on canned crab meat was increased from 15 percent to 22-1/2 percent, effective September 21, 1941. Less than 3 months later the United States entered the war, and as a result imports were practically eliminated for the duration. This short period is inadequate as a basis for any conclusions as to what effect the change in duty may have had upon the volume of imports.

CRAB MEAT, FRESH OR FROZEN (WHETHER OR NOT PACKED IN ICE)  
AND PREPARED OR PRESERVED, NOT IN AIRTIGHT CONTAINERS

Stat. import class (estab. Sept. 21, 1941): 0080.1

United States production, exports, and imports, 1937-39 and 1943

Year	Production 1/	Domestic exports 2/	Imports for consumption from--		
			All countries	Canada	SOVIET UNION
Quantity (1,000 pounds)					
1937	8,300	Not available	n.a.		
1938	9,356		n.a.		
1939	10,388		n.a.		
1943	3/ 8,888		4/-	4/-	-
Value (1,000 dollars)					
1937	2,822	Not available	n.a.		
1938	2,872		n.a.		
1939	3,279		n.a.		
1943	3/ 2,982		4/-	4/-	-

1/ Fresh and frozen crab meat only.

2/ Known to be negligible.

3/ Production statistics for 1942, the latest year for which data are available.

4/ Less than 500.

Sources: Production statistics from the U. S. Fish and Wildlife Service, imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff			Proposed negotiating country	
	Act of 1930	1945 rate			
		Percent ad valorem			
Par. 721(a) Crab meat, crab sauce, and crab paste: Fresh or frozen (whether or not packed in ice), and prepared or preserved, not in airtight containers	-----	15	15	SOVIET UNION	

Comment

In the United States crab meat, the product of the cooked hard-shell crab, is packed both in unsealed and in sealed containers. That packed in unsealed containers, being highly perishable, is kept in ice and is known to the trade as "fresh crab meat", and that packed in sealed containers is known as "canned" crab meat (see digest on 0080.0). Fresh crab meat like canned meat is used in cocktails, salads, and cooked dishes.

Hard shell crabs are found along the entire coast of the United States. The blue crab, found in inshore waters from Rhode Island to Texas, averages about 82 percent of the United States catch, and the dungeness crab, caught from California to Alaska, accounts for about 15 percent. The remainder of the catch consists of sand, rock, and stone crabs (East coast) and the king crabs (Alaska). The king crab is the principal species canned in the Japanese and Soviet Union crab fisheries.

CRAB MEAT, FRESH OR FROZEN (WHETHER OR NOT PACKED IN ICE)  
AND PREPARED OR PRESERVED, NOT IN AIRTIGHT CONTAINERS--Continued

Owing to the expansion of crab fishing on the South Atlantic, Gulf, and Pacific coasts, the United States catch increased from 75 million pounds (live weight) in 1930 to 100 million pounds in 1939. Production of fresh crab meat, in the same period, increased from 5-1/2 to 10 million pounds, and of canned crab meat from 77,000 to 640,000 pounds. Of the 10 million pounds of fresh crab meat produced in 1939, 88 percent was from the blue, 9 percent from the dungeness, and 3 percent from the sand, rock, and stone crab.

Substantially all fresh crab meat produced in the United States is consumed here; the Atlantic and Gulf coast product is distributed almost entirely in the East and Middle West, and the Pacific coast product is marketed on the West coast. In the past, imports of fresh crab meat have been insignificant, presumably chiefly because it is highly perishable. However, with the improvement in freezing technique, processors are quick-freezing increasing quantities of fresh-cooked crab meat. It is in this frozen form, which under appropriate refrigeration has a much wider range of distribution, that imports are most likely to compete with the fresh or frozen domestic product in the future. Conceivably, Japan and the Soviet Union (the principal pre-war sources of imported canned crab meat) might undertake to produce the frozen product for export to the United States.

RAZOR CLAMS, CANNED  
(*Siliqua patula*)

Stat. import class (1939): 0081.4

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports	Imports for consumption from--			
			All countries	CANADA	Japan	
Quantity (pounds)						
1937 ----	656,820	Not available	11,539	-	11,539	
1938 ----	1,356,315		4,036	-	3,958	
1939 ----	1,144,725		61,230	60,030	1,200	
1943 ----	605,100		36,060	36,060	-	
Value (dollars)						
1937 ----	380,302	Not available	765	-	765	
1938 ----	715,742		462	-	438	
1939 ----	616,308		11,357	11,214	143	
1943 ----	447,385		9,062	9,062	-	

Source: Production from statistics of the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Par. 721(b)	Item	United States tariff		Proposed negotiating country
		Act of 1930	1945 rate	
		Percent ad valorem		
	Razor clams, in air-tight containers	1/ 35	2/ 15	CANADA
1/	Reduced to 23 percent by Presidential proclamation, effective May 1934, under section 336 of the Tariff Act of 1930.			
2/	Trade agreement with Canada, effective January 1936.			

Comment

This digest covers razor clams of the species *Siliqua patula*, thus excluding the Atlantic coast clams of the *Ensis* species which are also called razor clams, but which are decidedly different from the clams under discussion, and are used almost entirely as fish bait.

United States production of canned razor clams is confined to Oregon, Washington, and Alaska. The pack amounted to about 2 million pounds in 1927 but declined to about 1 million pounds in 1940, largely owing to depletion of the clam beds. For the years 1941-44 the annual pack averaged around 600,000 pounds. Shortage of clam diggers and factory labor, and naval restrictions on activities along the beaches were factors contributing to the relatively small pack during the war years.

Official statistics indicate that canned razor clams are imported almost entirely from Canada and Japan. Available scientific data indicate, however, that clams of this species are not found in the northwest waters of the Pacific Ocean and it is believed, therefore, that imports from Japan were probably a species of clam which, when canned, closely resembled the product covered by this tariff classification.

## RAZOR CLAMS, CANNED-Continued

Canadian production is confined to British Columbia. Under the Tariff Act of 1922 United States imports of canned razor clams were free of duty. Statistics of imports are not available before 1931. However, according to Canadian statistics, exports from Canada to the United States during the 5 years ending March 31, 1930, averaged slightly more than 1 million pounds annually. There was a sharp decline in this trade following the imposition of a duty of 35 percent under the Tariff Act of 1930 (previously duty-free). This duty was reduced to 23 percent by Presidential proclamation, effective May 1934, under section 336 of the tariff act; it was further reduced to 15 percent in the trade agreement with Canada, effective January 1936. Imports, however, have not since 1936 approached the volume they attained in the late 1920's, largely because the same factors which resulted in decreasing domestic production were present in Canada.

Stat. import class (1939): 0078.5

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports	Imports for consumption from--				
			All countries	NORWAY	UNITED KINGDOM	Portugal	Japan
Quantity (pounds) 1/							
1937	177,408	Not available-	194,400	90,106	29,771	7,880	41,869
1938	191,376	small or nil	81,677	22,972	18,365	4,266	24,510
1939	122,016		102,332	40,135	13,162	17,075	15,310
1943	102,288		2/ 42,787	-	-	325	-
Value (dollars)							
1937	137,624	Not available-	46,857	18,193	17,847	2,441	4,206
1938	143,147	small or nil	18,979	4,646	9,066	968	2,322
1939	129,106		24,370	8,519	7,072	3,737	1,671
1943	102,408		2/ 8,787	-	-	312	-

1/ Production is net weight; imports include weight of immediate containers.

2/ Includes 37,102 pounds valued at \$6,595 imported from Canada free of duty as an act of international courtesy.

Source: Production, U. S. Fish and Wildlife Service; imports, official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
	Percent ad valorem		
Par. 721(c) Fish paste and fish sauce -----	30	1/ 20	UNITED KINGDOM NORWAY

1/ Trade agreement with the United Kingdom, effective January 1939.

Comment

Fish paste and fish sauce are used as hors-d'oeuvres and as condiments. Domestic production is confined almost entirely to fish paste, most of which is manufactured from imported salted anchovies; the anchovies formerly were imported from European countries (principally Spain), but during the war Argentina became the principal source. Domestic production also includes small quantities of sardine paste, herring paste, and shrimp and bloater (herring) paste.

Before the war imports were almost entirely from European and Asiatic countries with Japan the principal Asiatic source. In 1939 imports from Asiatic countries represented 23 percent of the weight but only 9 percent of the value of total imports. The low value of these imports (10 cents per pound) indicates that the bulk of them were probably fish sauce of a kind consumed principally by orientals in the United States.

Imports from other sources consist principally of pastes prepared from a great many species of fish, the principal ones being anchovies, herring (bloaters and kippers), sardines, salmon, and combinations such as salmon and shrimp, salmon and anchovy, shrimp and bloater. Imports from Europe and domestic production serve the same general purpose. Differences in price are dependent largely upon style and size of the container and the species of fish used.



## STURGEON CAVIAR (NOT BOILED, ETC.)

Stat. import class (1939): 0079.0

United States production, exports, and imports, 1937-39 and 1943

Year	Production 1/	Domestic exports	Imports for consumption from--				
			All countries	SOVIET UNION	Canada	France	United Kingdom
Quantity (pounds)							
1937	146,980	Not available--	225,845	222,275	1,005	-	112
1938	119,911		107,085	99,303	3,659	-	-
1939	91,299	(small or nil)	49,550	34,544	8,215	2,893	1,068
1943	n.a.		7,305	3,623	3,628	-	-
Value (dollars)							
1937	435,878	Not available--	320,753	306,245	976	-	120
1938	307,633		190,887	169,499	4,352	-	-
1939	343,818	(small or nil)	148,020	103,173	12,285	6,745	7,028
1943	n.a.		16,706	10,794	5,773	-	-

1/ Principally imported caviar repacked in small containers.

Source: Production from statistics of the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of	1945	
	1930	rate	
Percent ad valorem			
Par. 721(d)			
Caviar and other fish roe for food purposes:			
Sturgeon, not boiled -----	30	1/ 30	SOVIET UNION
1/ Duty bound against increase in trade agreement with Iran, effective June 1944.			

Comment

The sturgeon fishery, once of major importance, is now practically extinct commercially in the United States. The catch is incidental to other fishing, and it is highly improbable that the industry will ever recover its former importance. Production of sturgeon caviar from domestic sources is therefore of minor importance and not likely to increase. Production shown in the table above consists principally of imported caviar repacked in small containers.

Imports of sturgeon caviar greatly exceed domestic production, with the Soviet Union the predominant supplier. The Soviet sturgeon fishery is confined almost entirely to the Caspian Sea and the Volga River. Since the Caspian Sea contains the largest known available supplies of sturgeon, and since the Soviet Union and Iran are the only countries bordering on the Caspian, most future imports of sturgeon caviar will presumably come from this area, and almost entirely from the Soviet Union, as imports from Iran during the years preceding the war were insignificant and will likely continue unimportant. The catch of sturgeon in other foreign countries is limited owing to inadequate supplies.



CAVIAR AND OTHER FISH ROE (EXCEPT STURGEON), BOILED AND PACKED  
IN AIRTIGHT CONTAINERS

Stat. import class (1939): 0079.5

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports	Imports for consumption from—				
			All countries	NORWAY	Soviet Union	Sweden	Iceland
Quantity (1,000 pounds)							
1937	2,818	Not available	133	101	—	16	—
1938	2,476	available	77	64	—	10	—
1939	2,172	available	101	68	9	19	1/
1943	2,387	available	47	—	—	—	40
Value (1,000 dollars)							
1937	390	Not available	17	11	—	3	—
1938	329	available	10	7	—	2	—
1939	306	available	14	7	4	3	1/
1943	591	available	10	—	—	—	8

1/ Less than 500.

Source: Production statistics from U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	Act of 1930	1945 rate	
	Percent ad valorem		

Par. 721 (d)

Caviar and other fish roe (except sturgeon), for food purposes, boiled and packed in airtight containers, whether or not in bouillon or sauce

30 1/ 15

NORWAY

1/ Trade agreement with Iceland, effective November 1943.

Comment

The roe of a number of species of fish is boiled and canned. When prepared for subsequent use in cooked dishes, it is marketed as "roe," and usually designated by the name of the species except for roe from cod and related species (called deep sea roe) and roe from alewives (called herring roe). When prepared for use as hors d'oeuvres, it is usually marketed as "caviar" without species designation. The domestic pack and part of the imports are in brine or merely seasoned with salt; some of the imports are packed in highly seasoned sauce or bouillon. Sturgeon roe, used almost entirely in the production of sturgeon caviar, is not covered by this digest. So far as is known, there is no domestic or foreign production of boiled sturgeon roe.

Practically all of the domestic pack of boiled roe is from cod and related species (deep sea roe), alewives (herring roe), and shad, with only negligible quantities from tuna, mackerel, and menhaden. Of this group only shad roe is in the semi-luxury class of food products. Massachusetts produces most of the deep sea roe; Maryland, Virginia, and North Carolina, the herring roe; and Oregon and California, the shad roe. Little shad roe is canned in the East because of the strong demand for fresh shad roe. Domestic production of roe from alewives is several times greater than that of shad and cod roe combined.

CAVIAR AND OTHER FISH ROE (EXCEPT STURGEON), BOILED AND PACKED  
IN AIRTIGHT CONTAINERS--Continued

Since 1930 annual imports of canned boiled roe have not exceeded 133,000 pounds entered in 1937. Before the war about 75 percent of total imports came from Norway, with Sweden and Japan supplying most of the remainder in the order named. Of total imports amounting to 128,000 pounds in 1940, 83,000 pounds were entered from Iceland, hitherto an insignificant source. In 1945 total imports were only 9,500 pounds, with Newfoundland supplying almost two-thirds and Canada and Iceland the remainder.

Imports consist largely of cod and lumpfish roe. Because of the manner in which the imported product is prepared and because it usually sells at prices substantially higher than those for most of the domestic product, imports offer relatively little direct competition to the domestic varieties. Some of the imported cod roe is comparable with domestic deep sea, but the latter comprises only a small part of total domestic output.

## OYSTERS, CANNED

(Oysters, oyster juice, or either in combination with other substances, packed in air-tight containers)

Stat. import class (1939): 0081.1

United States production, exports, and imports, 1937-39 and 1943

Year	Production	Domestic exports	Imports for consumption from--			
			All countries	CHINA	Hong Kong	Japan
Quantity (pounds) <sup>1/</sup>						
1937----	12,216,378	Not available	229,313	41,719	150,925	36,532
1938----	7,824,567		166,130	82,123	44,395	39,548
1939----	9,959,133		236,699	154,921	58,901	24,877
1943----	3,231,177		113	40	-	-
Value (dollars)						
1937----	3,115,199	Not available	52,664	10,139	34,841	7,639
1938----	1,971,853		40,580	20,982	11,346	8,227
1939----	2,513,103		54,613	36,461	13,116	5,036
1943----	2,822,294		42	21	-	-

<sup>1/</sup> Production is net weight of oyster meats; imports include weight of immediate containers.

<sup>2/</sup> Believed to exceed imports.

Source: Production from statistics of the U. S. Fish and Wildlife Service; imports from official statistics of the U. S. Department of Commerce.

Item	United States tariff		Proposed negotiating country
	<u>Act of</u> <u>1930</u>	<u>1945</u> <u>rate</u>	
Cents per pound			

Par. 721(e)

Oysters, oyster juice, or either in combination with other substances, packed in air-tight containers

<sup>1/</sup> 8      <sup>1/</sup> 8

CHINA

<sup>1/</sup> Including weight of immediate container.

Note.- Ad valorem equivalents: 1939, 35 percent; 1943, 22 percent.

Comment

Oysters are canned in 10 States, but the bulk of the pack is in South Carolina, Mississippi, Louisiana, and Washington. More than 90 percent consists of canned oysters and the remainder is oyster soup and canned smoked oysters (a luxury product). Peak production since 1930 was reached in 1937, but has since declined, especially since 1941. Production is unlikely to reach again the 1937 level, owing to wider distribution and increasing demands for fresh oysters, which are more profitable for the producers. Imports from Hong Kong and China consist principally of specialty products consumed largely by orientals and not comparable to the domestic articles. Those from Japan, however, are mainly large oysters, comparable in size and style of pack to the product of the Pacific Coast States. Canning Pacific coast oysters was first undertaken in 1931. Since then a substantial market has been developed for these larger oysters, and it is likely that imports from Japan would have increased materially but for the duty.







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